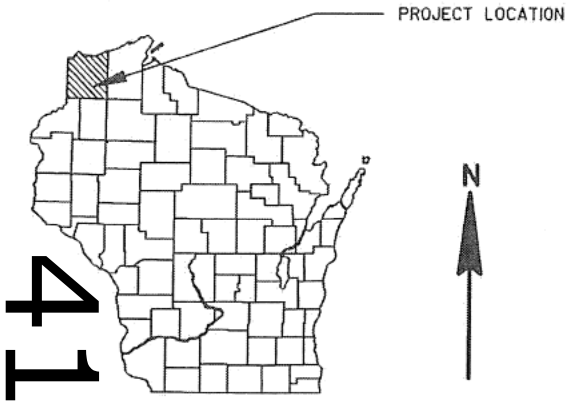


SUP. MAY 2014
PROJECT ID: 1195-01-74
WITH:

COUNTY: DOUGLAS

ORDER OF SHEETS	
Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 58



DESIGN DESIGNATION	
A.A.D.T. 2014	= 5200
A.A.D.T. 2034	= 6670
D.H.V.	= 1100
D.D.	= 62/38
T.	= 19%
DESIGN SPEED	= 70 MPH
ESALS	= 4,920,200

CONVENTIONAL SYMBOLS	
PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	---
LIMITED HIGHWAY EASEMENT	---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	---
REFERENCE LINE	---
EXISTING CULVERT	---
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	---
WOODED OR SHRUB AREA	---

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	---
CULVERT (Profile View)	---
UTILITIES	---
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---

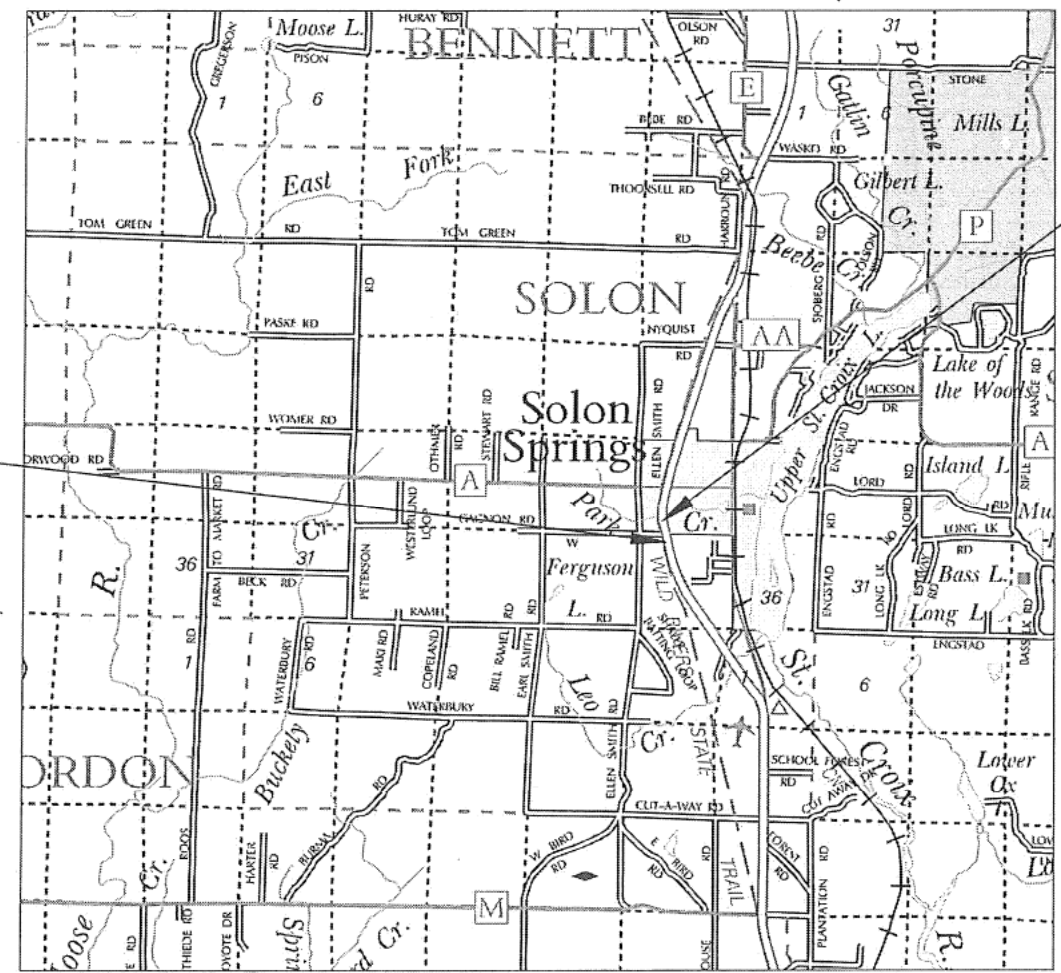
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
MINONG - SOLON SPRINGS
BALDWIN AVENUE INTERSECTION
USH 53
DOUGLAS COUNTY

STATE PROJECT NUMBER
1195-01-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1195-01-74	WISC 2014205	1

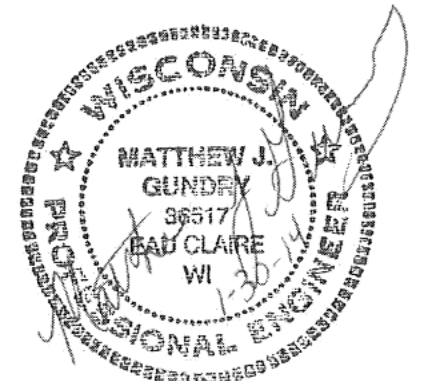
BEGIN PROJECT
STA. 923+27.00

END PROJECT
STA. 927+67.90



LAYOUT
SCALE 0 1 MI.
TOTAL NET LENGTH OF CENTERLINE = 0.084

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DOUGLAS COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	FAA, INC.
Designer	FAA, INC.
Project Manager	BRENDAN DIRKES
Regional Examiner	DANIEL OJIBWAY
Regional Supervisor	ANDREW STENSLAND
APPROVED FOR THE DEPARTMENT	
DATE: 1/30/14	Brendan Dirkes (Signature)

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LT	LEFT
AC	ACRE	LN	LANE
AGG	AGGREGATE	LS	LUMP SUM
ASPH	ASPHALTIC	LT	LEFT
AVG	AVERAGE	MAX	MAXIMUM
ADT	AVERAGE DAILY TRAFFIC	MH	MANHOLE
BAH	BEARING AHEAD	MIN	MINIMUM
BBK	BEARING BACK	MI	MILE
BF	BACK FACE	ML	MAINLINE
BM	BENCH MARK	N	NORTH
BR	BRIDGE	NC	NORMAL CROWN
C/L	CENTER LINE	NO	NUMBER
Δ	CENTRAL ANGLE OR DELTA	NOR	NORMAL
CE	COMMERCIAL ENTRANCE	OBLIT	OBLITERATE
CMP	CORRIGATED METAL PIPE	PAVT	PAVEMENT
CONC	CONCRETE	PC	POINT OF CURVATURE
CP	CULVERT PIPE	PE	PRIVATE ENTRANCE
CP	CONTROL POINT	PI	POINT OF INTERSECTION
CPCP	CULVERT PIPE CORRUGATED POLYETHYLENE	POB	POINT OF BEGINNING
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III	POE	POINT OF ENDING
CR	CREEK	PT	POINT OF TANGENCY
CWT	HUNDREDWEIGHT	PVC	POINT OF VERTICAL CURVATURE
CY	CUBIC YARD	PVI	POINT OF VERTICAL INTERSECTION
C & G	CURB AND GUTTER	PVRC	POINT OF VERTICAL REVERSE CURVATURE
D	DEGREE OF CURVE/BOX DEPTH	PVT	POINT OF VERTICAL TANGENCY
DHV	DESIGN HOUR VOLUME	R/RAD	RADIUS
DD	DIRECTIONAL DISTRIBUTION	RCCP	REINFORCED CONCRETE CULVERT PIPE
DISCH	DISCHARGE	REQ'D	REQUIRED
DG	DITCH GRADE	RES	RESIDENCE OR RESIDENTIAL
DWY	DRIVEWAY	RHF	RIGHT-HAND FORWARD
E	EAST	R/W	RIGHT OF WAY
EL/ELEV	ELEVATION	RD	ROAD
ENT	ENTRANCE	RDWY	ROADWAY
ESALS	EQUIVALENT SINGLE AXLE LOADS	RR	RAILROAD
EXC	EXCAVATION	RT	RIGHT
EBS	EXCAVATION BELOW SUBGRADE	SALV	SALVAGED
EXIST	EXISTING	SAN S	SANITARY SEWER
FE	FIELD ENTRANCE	S	SOUTH
FERT	FERTILIZE	SQ	SQUARE
FF	FACE TO FACE	SF	SQUARE FEET
FL	FLOW LINE	SY	SQUARE YARD
FO	FIBER OPTIC	SDD	STANDARD DETAIL DRAWINGS
FS	FULL SUPER ELEVATION	STH	STATE TRUNK HIGHWAYS
FT	FOOT	STA	STATION
G	GRADE	SS	STORM SEWER
HMA	HOT MIX ASPHALT	SE	SUPERELEVATION
HYD	HYDRANT	T	TANGENT LENGTH
ID	INSIDE DIAMETER	T.	TRUCKS (PERCENT OF)
INV	INVERT	TC	TOP OF CURB
IP	IRON PIPE OR PIN	T OR TN	TOWN
K	RATE OF VERTICAL CURVATURE	TLE	TEMPORARY LIMITED EASEMENT
LHF	LEFT-HAND FORWARD	t	TON
L	LENGTH OF CURVE	TYP.	TYPICAL
LB	POUND	VAR	VARIABLE
LF	LINEAR FOOT	VC	VERTICAL CURVE
LCB	LONG CHORD BEARING	W	WEST
LC	LONG CHORD	X	EAST GRID COORDINATE
LN	LANE	Y	NORTH GRID COORDINATE
		YD	YARD

GENERAL NOTES

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO USGS DATUM.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE SALVAGED TOPSOILED, FERTILIZED, SEEDED AND MULCHED

BEARINGS SHOWN ON THE PLANS ARE COUNTY BEARINGS TO THE NEAREST SECOND.

THE LOCATION OF THE DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

SIGN PLATE DETAILS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" UNLESS OTHERWISE PROVIDED FOR IN THE PLAN.

CURVE DATA IS BASED ON THE ARC DEFINITION.

SEED MIXTURE NO. 20 SHALL BE USED THROUGHOUT THE PROJECT.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE COUNTY LAND SURVEYOR CONCERNING MONUMENT AND PROPERTY CORNER PRESERVATION. LANDMARK REFERENCE MONUMENTS SHALL BE PERPETUATED BY THE COUNTY SURVEYOR.

RADIUS DIMENSIONS ARE SHOWN TO FLAGLINE OF CURB & GUTTER OR EDGE OF PAVEMENT.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

USE 12.5 mm AGGREGATE IN ASPHALTIC SURFACE. PLACE ASPHALTIC SURFACE IN ONE LAYER ON CTH A, AND IN TWO LAYERS ON BALDWIN AVE.

DESIGN CONTACT

FLEMING, ANDRE & ASSOCIATES, INC.
3615 N. HASTINGS WAY
SUITE 100
EAU CLAIRE, WI. 54703-0474
ATTENTION: MATT GUNDRY
PHONE: 715-832-8400

W.D.N.R. CONTACT

DEPARTMENT OF NATURAL
RESOURCES
810 W. MAPLE ST.
SPOONER, WI 54801
ATTENTION: AMY CRONK
PHONE: 715-635-4229

UTILITIES

CENTURY LINK
20 S WILSON AVE
RICE LAKE, WI 54868
ATTN: MONTY PARKER
PHONE: 715-234-5528

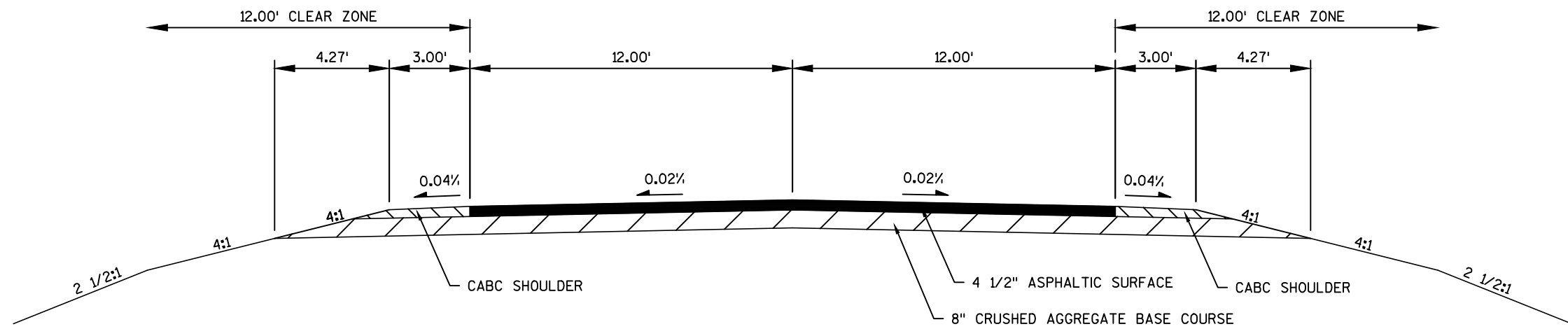
DAHLBERG LIGHT AND POWER COMPANY
9221 E MAIN
SOLON SPRINGS, WI 54873-0300
ATTN: JAMES DAHLBERG
PHONE: 715-378-2205

SUPERIOR WATER, LIGHT AND POWER COMPANY
2915 HILL AVE
SUPERIOR, WI 54880
ATTN: JAMISON MEHLE
PHONE: 715-394-2300

ENBRIDGE ENERGY
1500 W MAIN ST
GRIFFITH, IN 46319
ATTN: MIKE PRICE
PHONE: 219-922-7015

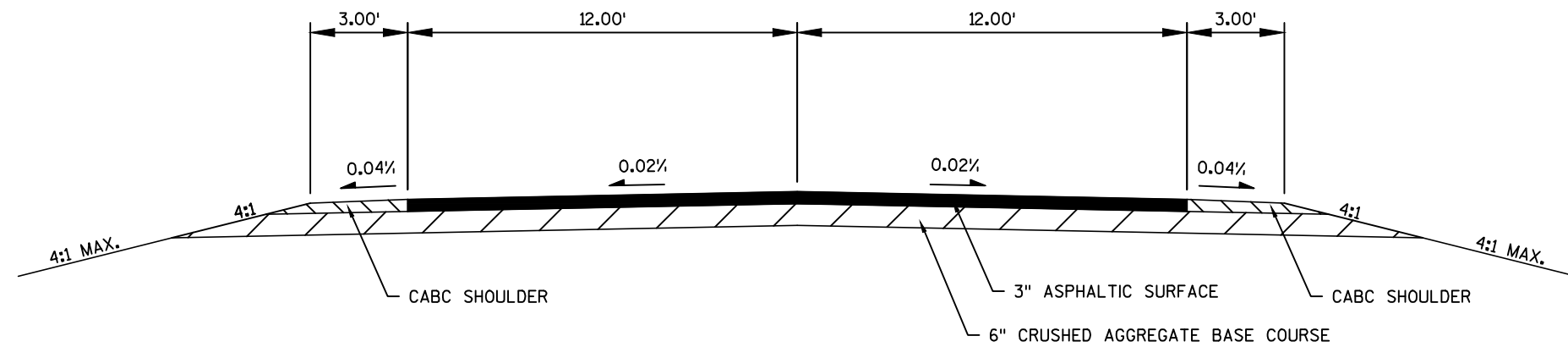


Dial  or (800)242-8511
www.DiggersHotline.com



EXISTING TYPICAL SECTION BALDWIN AVENUE

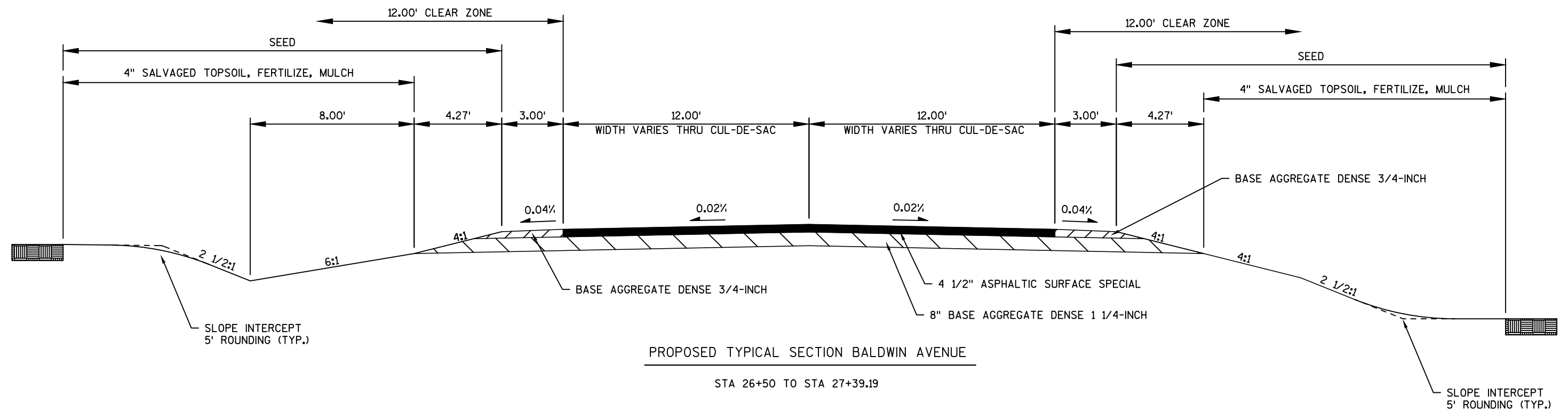
STA 26+50 TO STA 28+70



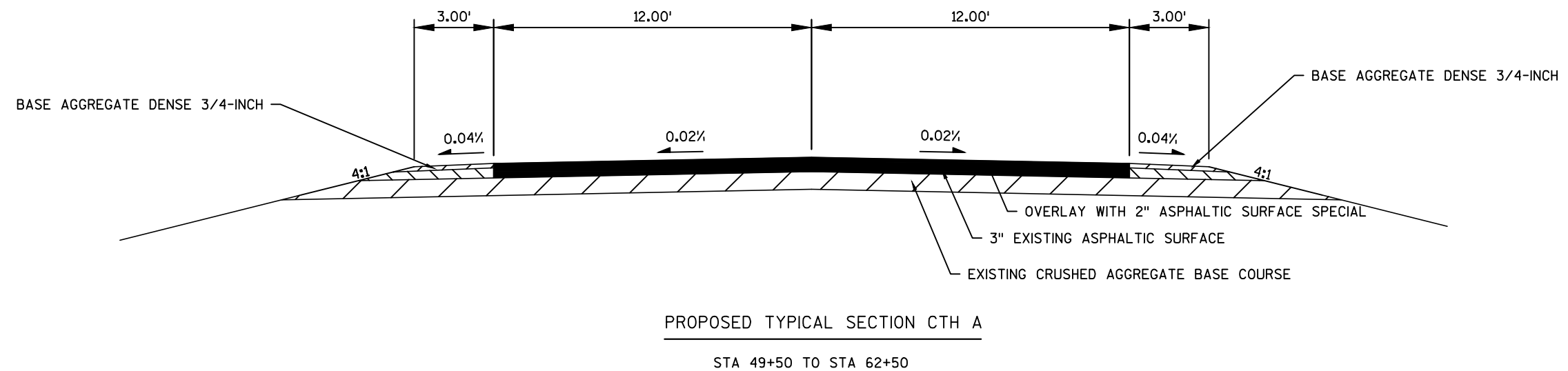
EXISTING TYPICAL SECTION CTH A

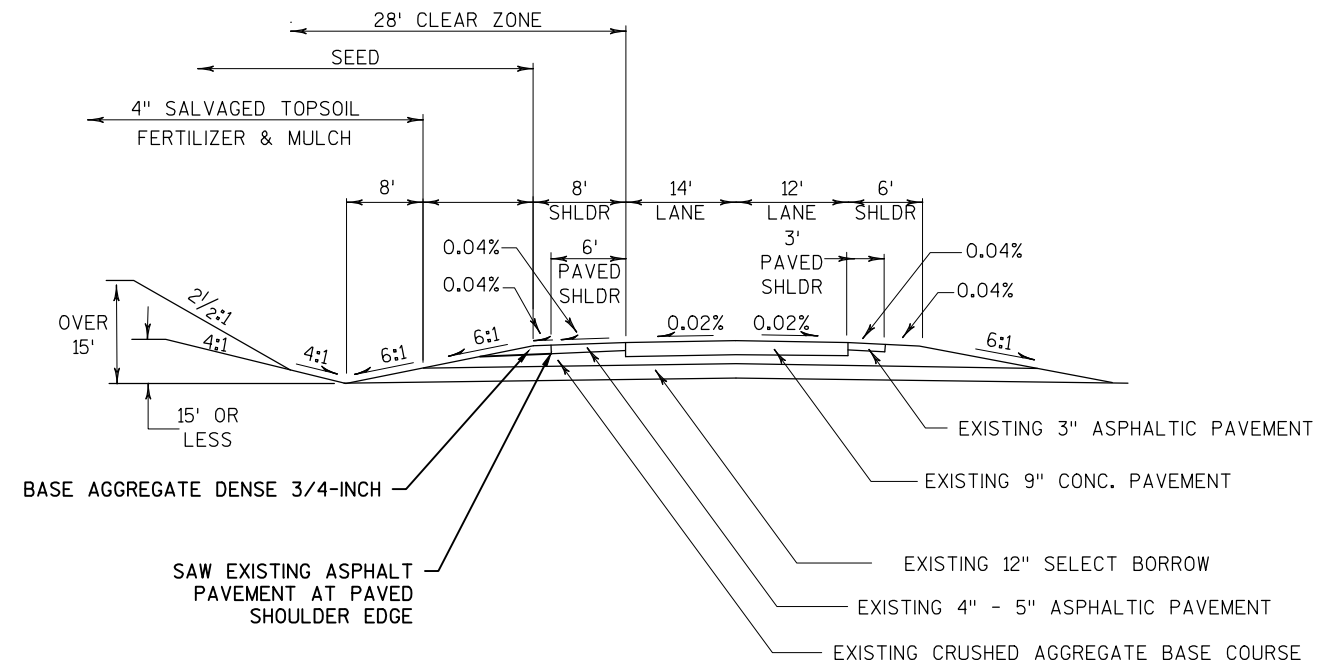
STA 49+50 TO STA 53+50

2

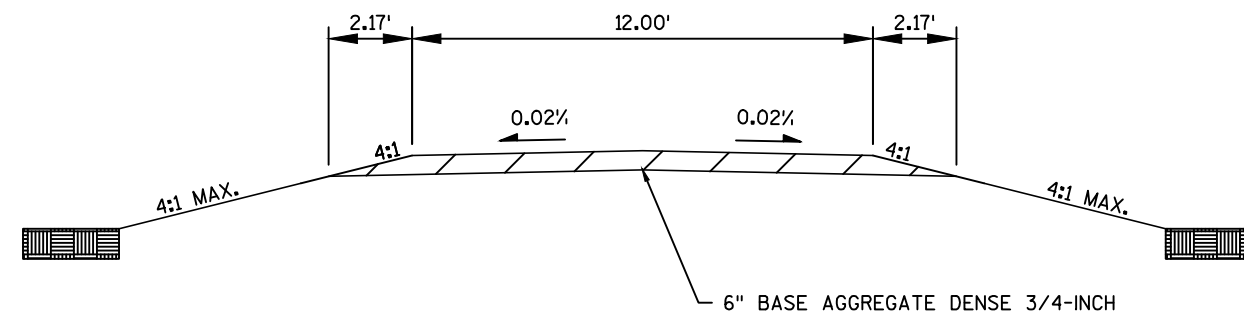


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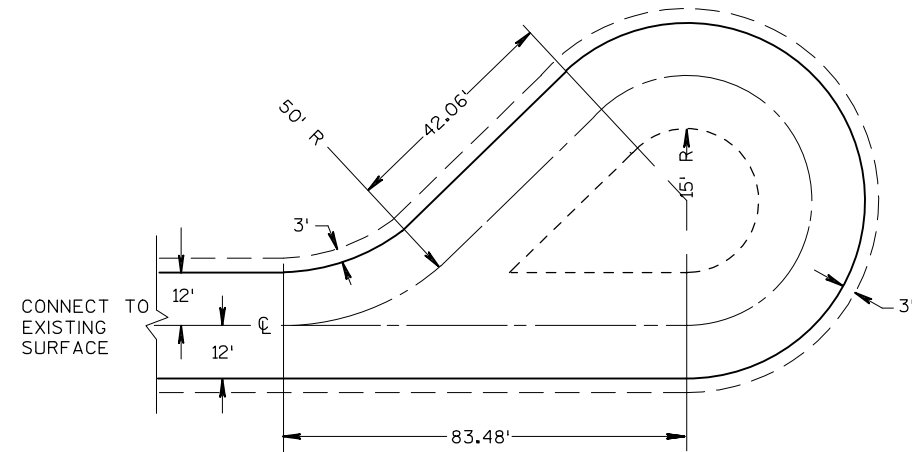




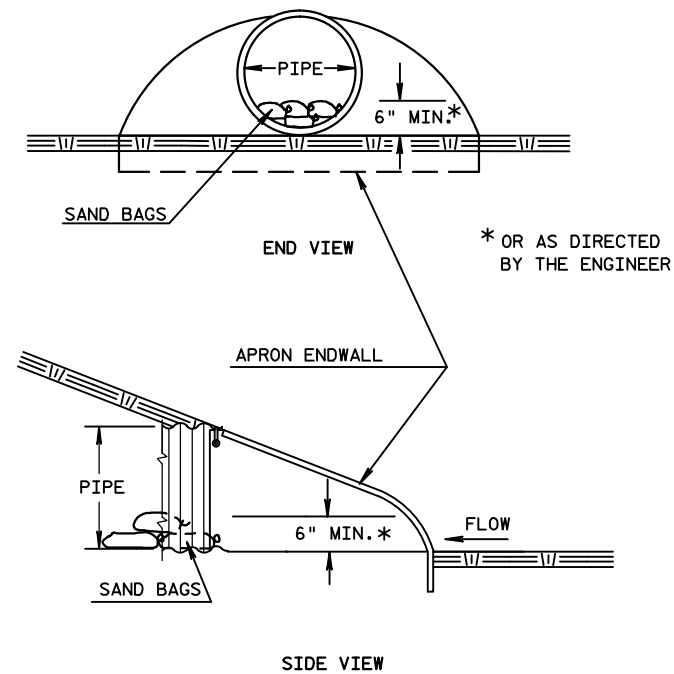
FINISHED TYPICAL SECTION USH 53 SB
STA 923+27.00 TO STA 927+67.90



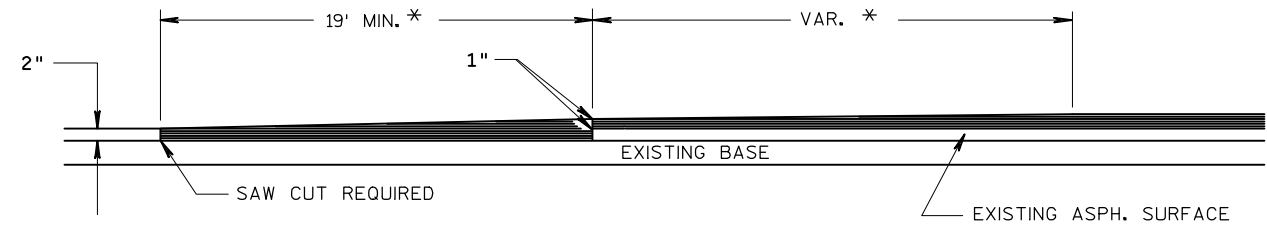
FINISHED TYPICAL SECTION
WILD RIVERS TRAIL



DETAIL LAYOUT OF CUL-DE-SAC

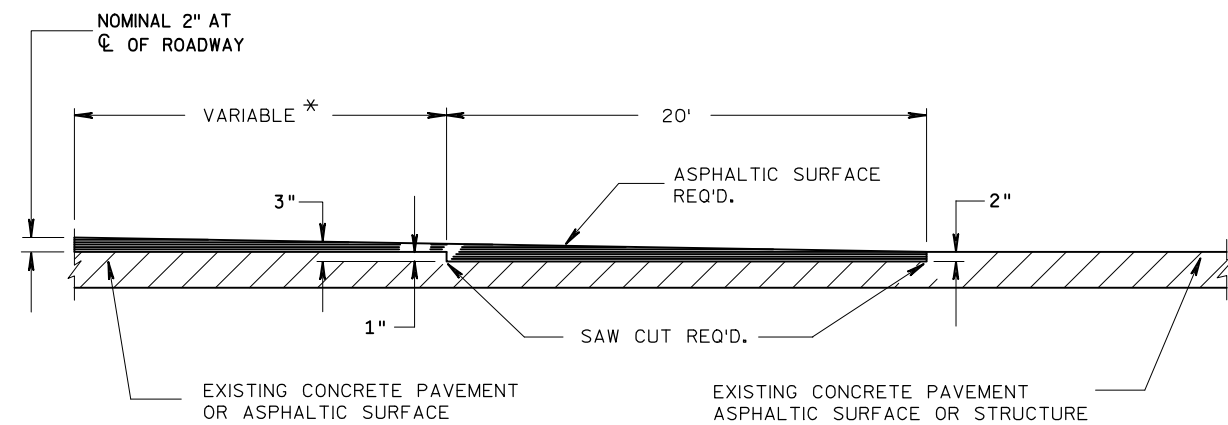


CULVERT PIPE CHECK



DETAIL OF MAINLINE OVERLAP BUTTED JOINT

* EXACT DIMENSIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

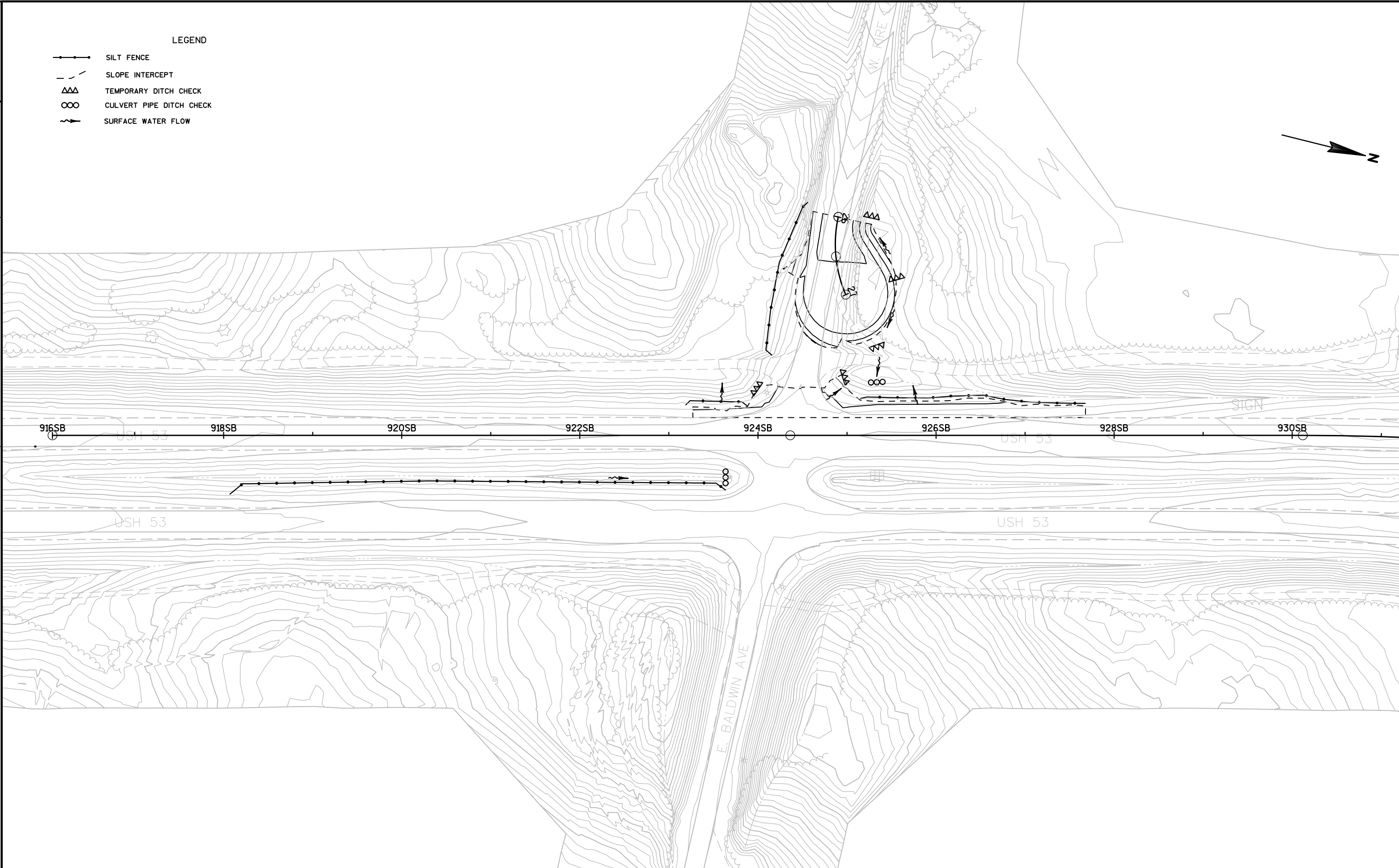


DETAIL OF BUTTED JOINT

* EXACT DIMENSIONS TO BE DETERMINED BY ENGINEER IN THE FIELD.

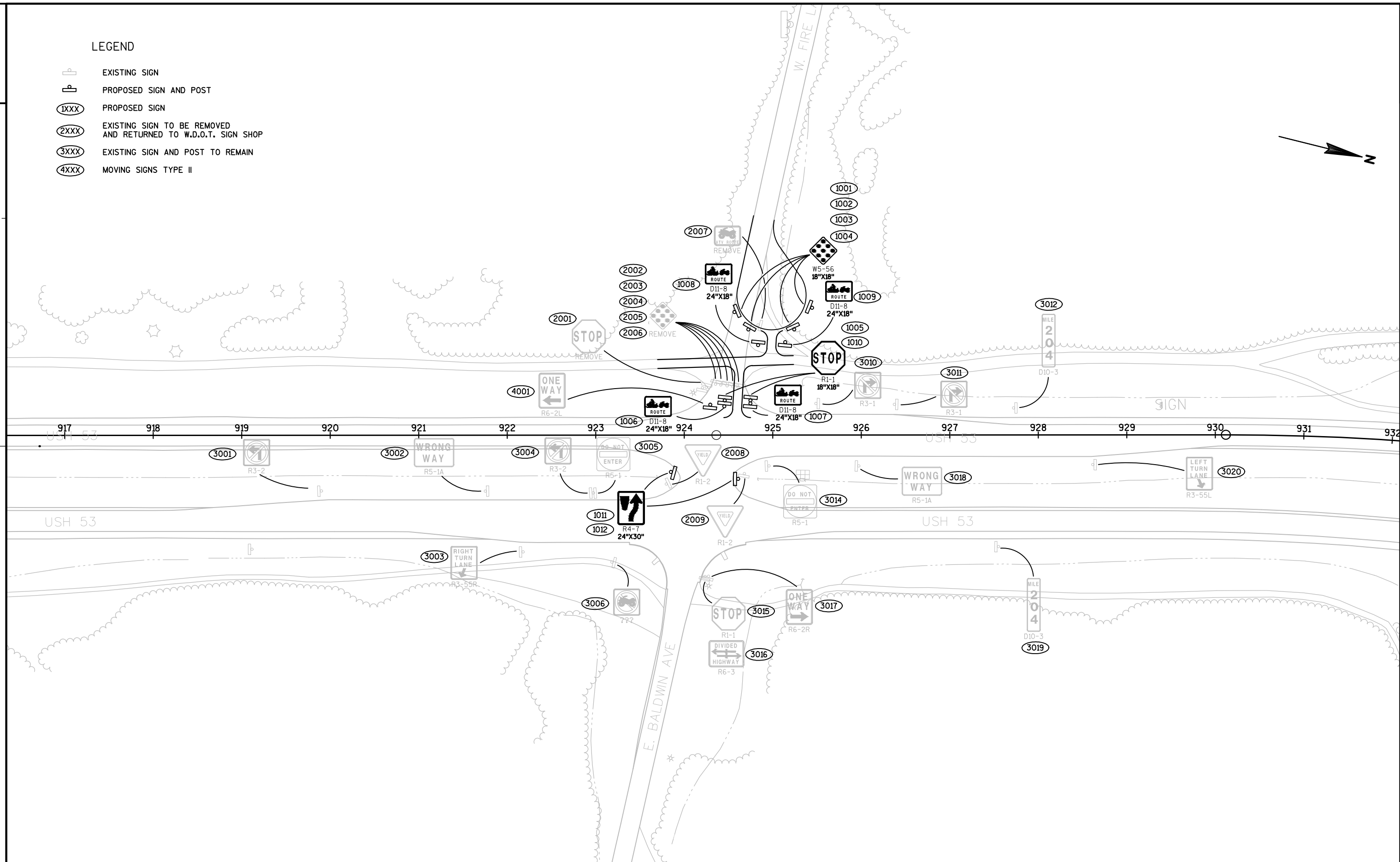
LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

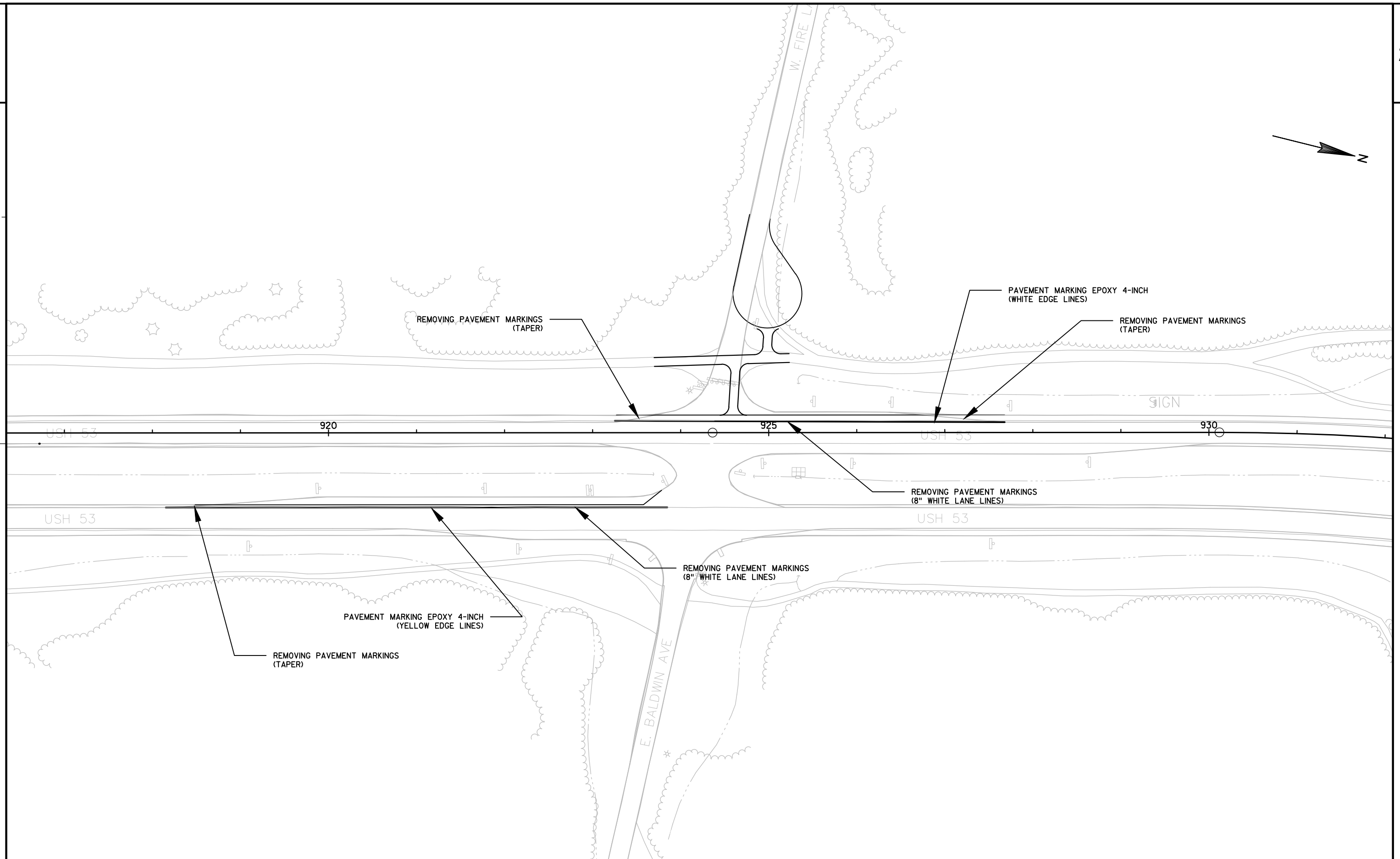


LEGEND

- EXISTING SIGN
- PROPOSED SIGN AND POST
- PROPOSED SIGN
- EXISTING SIGN TO BE REMOVED AND RETURNED TO W.D.O.T. SIGN SHOP
- EXISTING SIGN AND POST TO REMAIN
- MOVING SIGNS TYPE II



PROJECT NO:1195-01-74	HWY:USH 53	COUNTY:DOUGLAS	PERMANENT SIGNING	SHEET	E
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PROJECT NO:1195-01-74

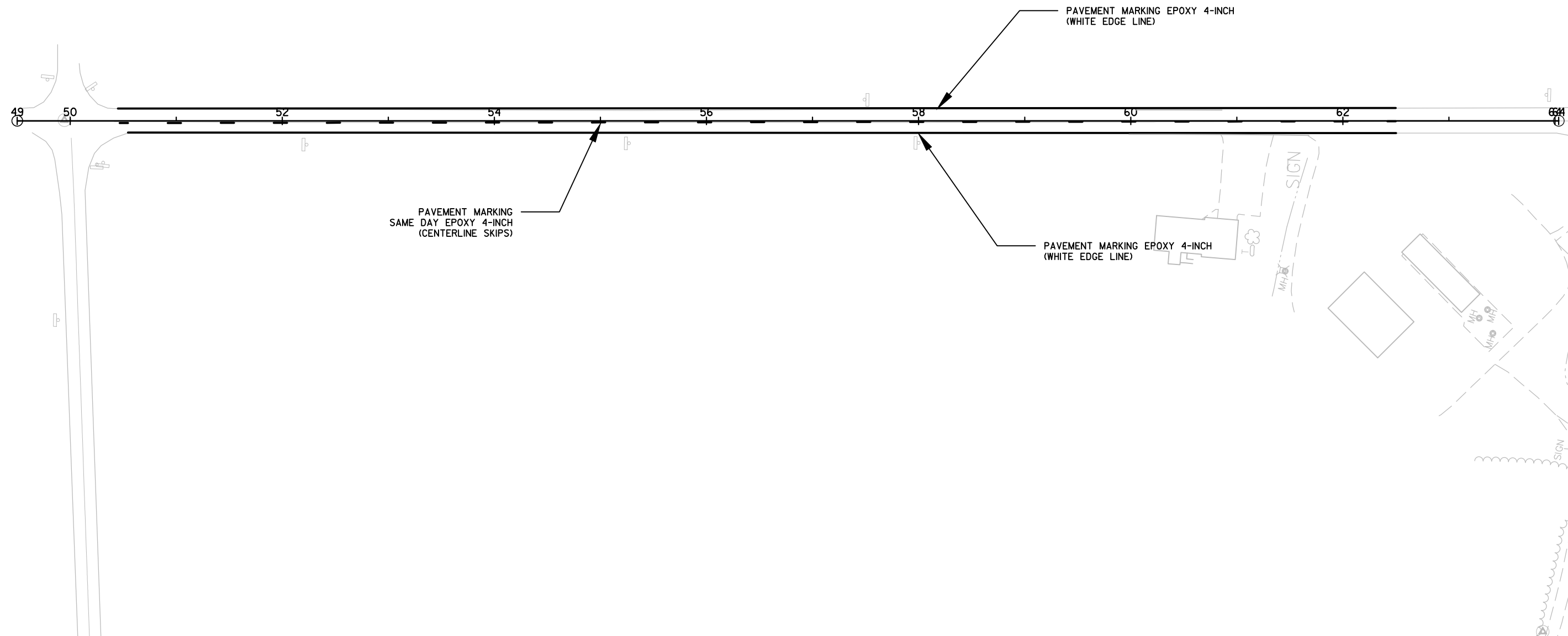
HWY: USH 53

COUNTY: DOUGLAS

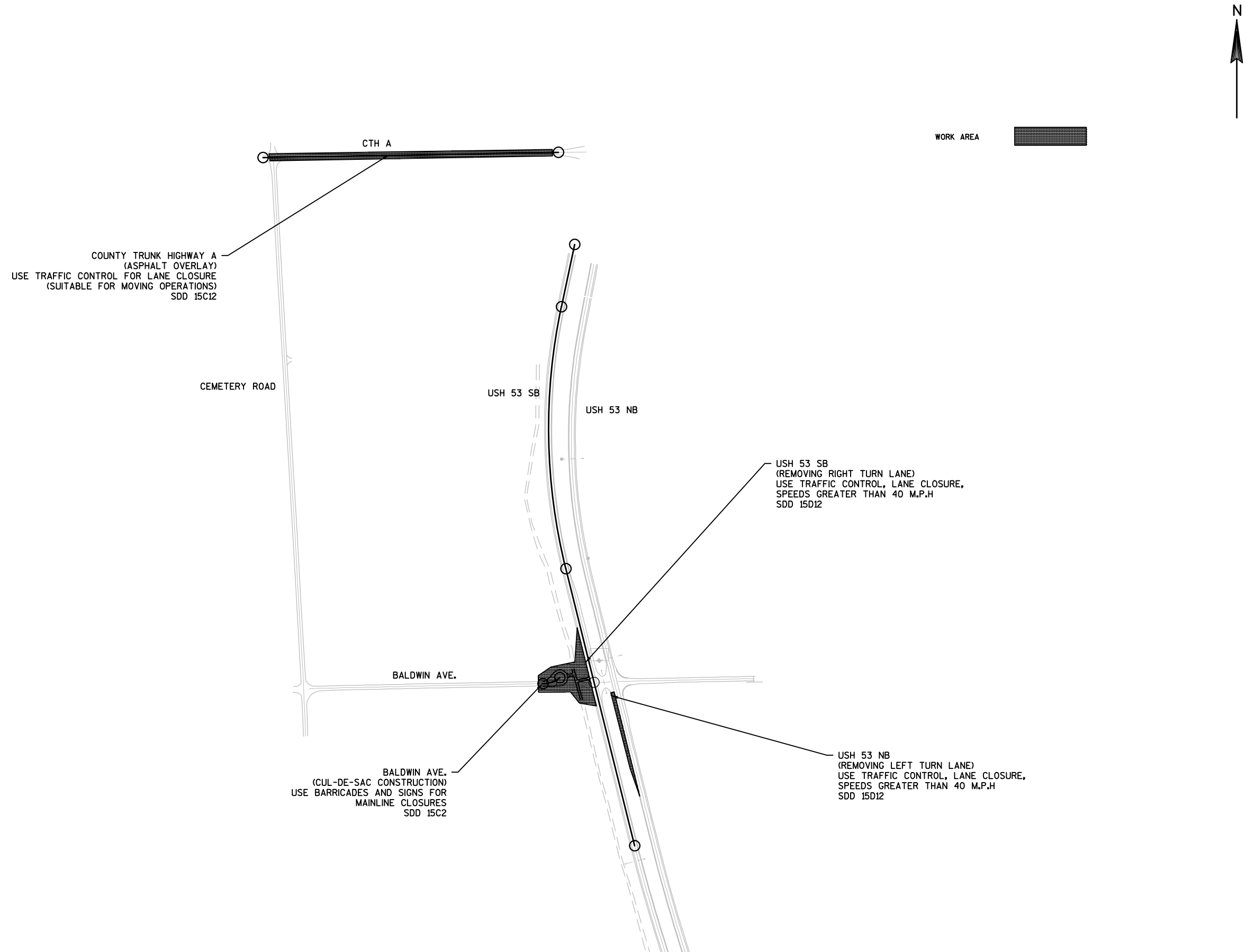
PAVEMENT MARKING

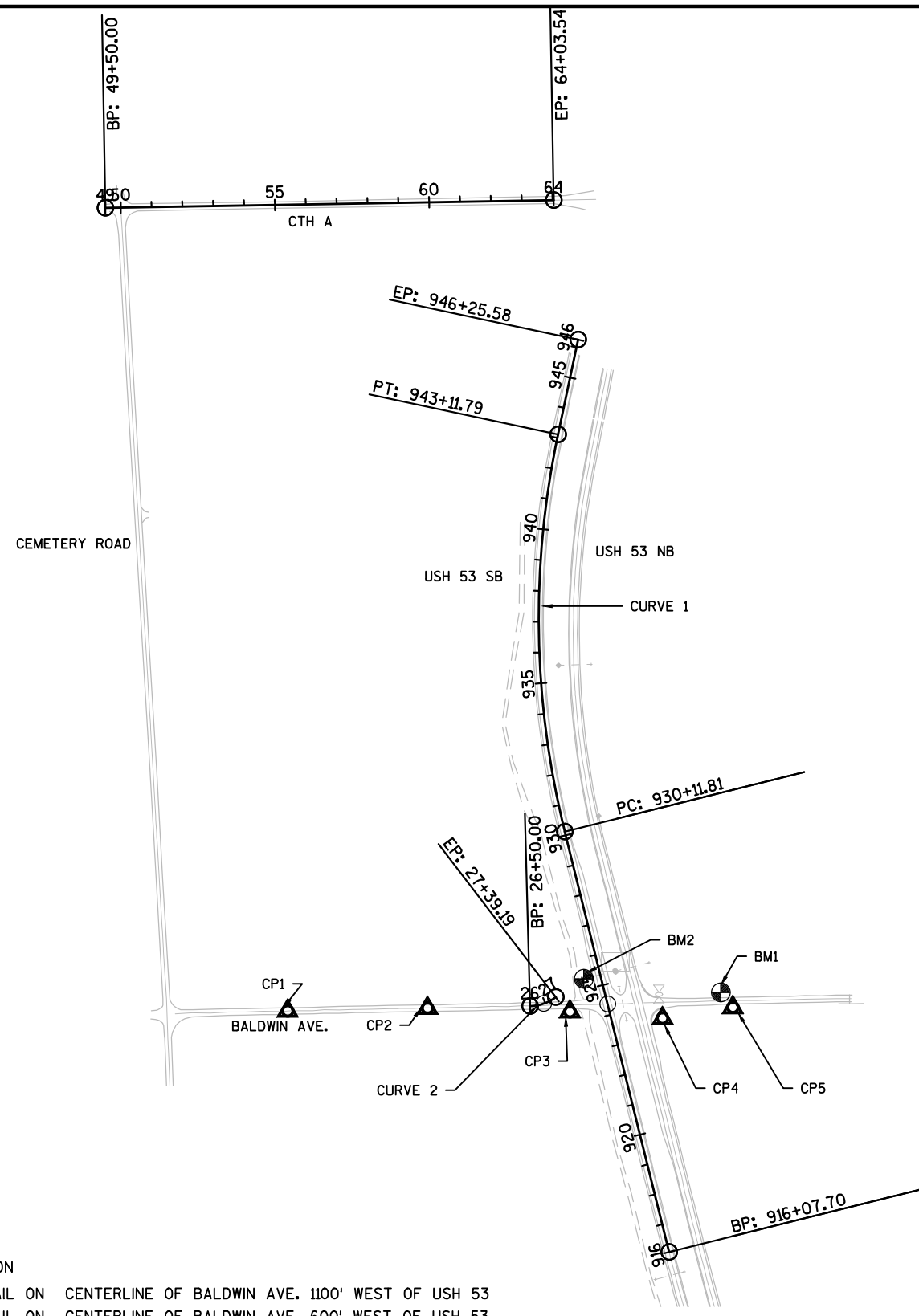
SHEET

E



PROJECT NO:1195-01-74	HWY:CTH A	COUNTY:DOUGLAS	PAVEMENT MARKINGS	SHEET	E
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CURVE 1

PI STA. 936+73.13
Y : 169,759.89
X : 214,287.70
DELTA = 25° 56' 02.46"
T = 661.32'
L = 1,299.98'
R = 2,872.04'
PCC STA. 930+11.81
Y : 169,118.03
X : 214,446.96
PCC STA. 943+11.79
Y : 170,406.76
X : 214,425.18
BK : N 13° 56' 06.21 W
AH : N 11° 59' 56.25" E

CURVE 2

PI STA. 26+96.11
Y : 168,553.91
X : 214,380.62
DELTA = 35° 50' 44.18"
T = 46.11'
L = 89.19'
R = 142.55'
PCC STA. 26+50.00
Y : 168,552.69
X : 214,334.53
PCC STA. 27+39.19
Y : 168,581.89
X : 214417.26



	CONTROL POINTS			LOCATION
	NORTHING	EASTING	ELEVATION	
CP1	168536.616	213548.308	1138.987	MAG NAIL ON CENTERLINE OF BALDWIN AVE. 1100' WEST OF USH 53
CP2	168546.024	214001.408	1137.988	MAG NAIL ON CENTERLINE OF BALDWIN AVE. 600' WEST OF USH 53
CP3	168534.119	214463.406	1126.458	REBAR WITH CAP SET IN SHOULDER LOCATED 175' WEST OF USH 53 AND BALDWIN AVE. INTERSECTION
CP4	168513.155	214763.528	1125.115	REBAR WITH CAP SET 30' BACK FROM CURB AND GUTTER LOCATED 100' EAST OF USH 53 AND BALDWIN AVE. INTERSECTION
CP5	168548.155	214991.62	1127.943	REBAR WITH CAP LOCATED 350' EAST OF USH 53 AND BALDWIN AVE. INTERSECTION 12' FROM EDGE OF PAVEMENT
	BENCHMARKS			LOCATION
	NORTHING	EASTING	ELEVATION	
BM1	168596.433	214952.334	1127.657	BENCH TIE NAIL SET IN POWER POLE 325' EAST OF USH 53 AND BALDWIN AVE. INTERSECTION
BM2	168641.124	214508.074	1123.783	CHISELED "X" ON TOP OF RCCP 100' WEST OF USH 53 AND BALDWIN AVE. INTERSECTION

DATE 12MAR14		E S T I M A T E O F Q U A N T I T I E S			
LINE				1195-01-74	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING	STA	1.000	1.000
0020	201.0205	GRUBBING	STA	1.000	1.000
0030	204.0110	REMOVING ASPHALTIC SURFACE	SY	530.000	530.000
0040	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	630.000	630.000
0050	204.0157	REMOVING CONCRETE BARRIER	LF	60.000	60.000
0060	205.0100	EXCAVATION COMMON	CY	156.000	156.000
0070	208.0100	BORROW	CY	679.000	679.000
0080	213.0100	FINISHING ROADWAY (PROJECT) 01. 1195-01-74	EACH	1.000	1.000
0090	214.0100	OBLITERATING OLD ROAD	STA	1.000	1.000
0100	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	465.000	465.000
0110	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	370.000	370.000
0120	305.0500	SHAPING SHOULDERS	STA	12.000	12.000
0130	455.0605	TACK COAT	GAL	105.000	105.000
0140	465.0105	ASPHALTIC SURFACE	TON	590.000	590.000
0150	465.0400	ASPHALTIC SHOULDER RUMBLE STRIP	LF	995.000	995.000
0160	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1195-01-74	EACH	1.000	1.000
0170	619.1000	MOBILIZATION	EACH	1.000	1.000
0180	625.0500	SALVAGED TOPSOIL	SY	1,390.000	1,390.000
0190	627.0200	MULCHING	SY	1,390.000	1,390.000
0200	628.1504	SILT FENCE	LF	1,100.000	1,100.000
0210	628.1520	SILT FENCE MAINTENANCE	LF	1,100.000	1,100.000
0220	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0230	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0240	628.7504	TEMPORARY DITCH CHECKS	LF	75.000	75.000
0250	628.7555	CULVERT PIPE CHECKS	EACH	2.000	2.000
0260	629.0210	FERTILIZER TYPE B	CWT	0.900	0.900
0270	630.0120	SEEDING MIXTURE NO. 20	LB	25.000	25.000
0280	633.5200	MARKERS CULVERT END	EACH	2.000	2.000
0290	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	6.000	6.000
0300	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	4.000	4.000
0310	634.0620	POSTS WOOD 4X6-INCH X 20-FT	EACH	2.000	2.000
0320	637.2210	SIGNS TYPE II REFLECTIVE H	SF	26.500	26.500
0330	637.2220	SIGNS TYPE II REFLECTIVE SH	SF	9.000	9.000
0340	638.2602	REMOVING SIGNS TYPE II	EACH	7.000	7.000
0350	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	7.000	7.000
0360	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0370	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1195-01-74	EACH	1.000	1.000
0380	643.0300	TRAFFIC CONTROL DRUMS	DAY	200.000	200.000
0390	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	135.000	135.000
0400	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	170.000	170.000
0410	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	60.000	60.000
0420	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	20.000	20.000
0430	643.0900	TRAFFIC CONTROL SIGNS	DAY	115.000	115.000
0440	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	2,970.000	2,970.000
0450	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	270.000	270.000
0460	646.0600	REMOVING PAVEMENT MARKINGS	LF	595.000	595.000
0470	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	100.000	100.000
0480	650.5000	CONSTRUCTION STAKING BASE	LF	100.000	100.000
0490	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	950.000	950.000
0500	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1195-01-74	LS	1.000	1.000

DATE 12MAR14			E S T I M A T E O F Q U A N T I T I E S			
LINE			1195-01-74			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	
0510	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	600.000	600.000	
0520	690.0150	SAWING ASPHALT	LF	985.000	985.000	
0530	ASP. 1TOA	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	1,200.000	1,200.000	
0540	ASP. 1TOG	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	300.000	300.000	

3

CLEARING				201.0105	
STATION	TO	STATION	LOCATION	STA.	CATEGORY
26+50	TO	27+50	LT & RT	1	010
ITEM TOTAL				1	

GRUBBING				201.0205	
STATION	TO	STATION	LOCATION	STA.	CATEGORY
26+50	TO	27+50	LT & RT	1	010
ITEM TOTAL				1	

REMOVING ASPHALTIC SURFACE				204.0110	
STATION	TO	STATION	LOCATION	S.Y.	CATEGORY
918+48	TO	923+77	NB USH 53 LT TURN LANE	530	010
ITEM TOTAL				530	

REMOVING ASPHALTIC SURFACE BUTT JOINTS				204.0115	
STATION	TO	STATION	LOCATION	S.Y.	CATEGORY
49+50	TO	50+00	CTH A & CEMETARY RD	129	010
49+90	TO	50+10	CTH A & CEMETARY RD	112	010
49+89	TO	50+11	CTH A & CEMETARY RD	123	010
60+85	TO	61+34	CTH A, RT	55	010
61+75	TO	62+50	CTH A, RT	83	010
62+00	TO	62+50	CTH A & USH 53	128	010
ITEM TOTAL				630	

REMOVING CONCRETE BARRIER				204.0157	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
924+18	TO	924+78	USH 53 AND BALDWIN AVE.	60	010
ITEM TOTAL				60	

3

FINISHING ROADWAY				213.0100	
STATION	TO	STATION	LOCATION	L.S.	CATEGORY
94+50	TO	103+40	USH 53	1	010
ITEM TOTAL				1	

OBLITERATING OLD ROAD				214.0100	
STATION	TO	STATION	LOCATION	STA	CATEGORY
27+75	TO	28+75	*PROJECTED TANGENT BALDWIN ALL.	1	010
ITEM TOTAL				1	

BASE AGGREGATE DENSE 3/4-INCH				305.0110	
STATION	TO	STATION	LOCATION	TON	CATEGORY
923+68	TO	927+33	USH 53 SB RT TURN LANE	80	010
918+67	TO	923+57	USH 53 NB LT TURN LANE	110	010
26+50	TO	27+78	CUL-DE-SAC	25	010
18+65	TO	19+65	TRAIL	120	010
49+50	TO	62+50	CTH A SHOULDERS	130	010
ITEM TOTAL				465	

BASE AGGREGATE DENSE 1 1/4-INCH				305.0120	
STATION	TO	STATION	LOCATION	TON	CATEGORY
26+50	TO	27+78	CUL-DE-SAC	370	010
ITEM TOTAL				370	

SHAPING SHOULDERS				305.0500	
STATION	TO	STATION	LOCATION	STA.	CATEGORY
918+67	TO	923+57	USH 53 SB RT TURN LANE	5	010
923+68	TO	927+33	USH 53 NB LT TURN LANE	4	010
26+50	TO	27+78	CUL-DE-SAC	3	010
ITEM TOTAL				12	

TACK COAT				455.0605	
STATION	TO	STATION	LOCATION	GAL.	CATEGORY
26+50	TO	27+78	CUL-DE-SAC	18	010
49+50	TO	62+50	CTH A	87	010
ITEM TOTAL				105	

ASPHALTIC SURFACE				465.0105	
STATION	TO	STATION	LOCATION	TON	CATEGORY
26+50	TO	27+78	CUL-DE-SAC	190	010
49+50	TO	62+50	CTH A	400	010
ITEM TOTAL				590	

ASPHALTIC SHOULDER RUMBLE STRIP					465.0400	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY	
918+20	TO	923+75	USH 53 NB (MEDIAN SHOULDER)	555	010	
923+25	TO	927+65	USH 53 SB (LT SHOULDER)	440	010	
ITEM TOTAL				995		

MOBILIZATION					619.1000	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
923+27	TO	927+68	USH 53 & BALDWIN AVE	1	010	
ITEM TOTAL				1		

SALVAGED TOPSOIL					625.0500	
STATION	TO	STATION	LOCATION	S.Y.	CATEGORY	
26+50	TO	27+78	BALDWIN AVE. LT & RT	723	010	
925+13	TO	927+33	USH 53 SB RT TURN	667	010	
ITEM TOTAL				1390		

MULCHING					627.0200	
STATION	TO	STATION	LOCATION	S.Y.	CATEGORY	
26+50	TO	27+78	BALDWIN AVE. LT & RT	723	010	
925+13	TO	927+33	USH 53 SB RT TURN	667	010	
ITEM TOTAL				1390		

SILT FENCE					628.1504	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY	
26+50	TO	27+78	BALDWIN AVE RT	200	010	
923+27	TO	927+68	USH 53 SB LT	330	010	
918+00	TO	923+70	USH 53 NB LT	570	010	
ITEM TOTAL				1100		

SILT FENCE MAINTENANCE					628.1520	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY	
26+50	TO	27+78	BALDWIN AVE RT	200	010	
923+27	TO	927+68	USH 53 SB LT	330	010	
918+00	TO	923+70	USH 53 NB LT	570	010	
ITEM TOTAL				1100		

MOBILIZATIONS EROSION CONTROL					628.1905	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
918+00	TO	927+68	USH 53 & BALDWIN AVE	2	010	
ITEM TOTAL				2		

MOBILIZATIONS EMERGENCY EROSION CONTROL					628.1910	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
918+00	TO	927+68	USH 53 & BALDWIN AVE	2	010	
ITEM TOTAL				2		

TEMPORARY DITCH CHECKS					628.7504	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
918+00	TO	927+68	USH 53 & BALDWIN AVE	75	010	
ITEM TOTAL				75		

CULVERT PIPE CHECKS					628.7555	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
923+70			USH 53 MEDIAN	1	010	
925+20			USH 53 SB LT	1	010	
ITEM TOTAL				2		

FERTILIZER, TYPE B					629.0210	
STATION	TO	STATION	LOCATION	CWT.	CATEGORY	
26+50	TO	27+78	BALDWIN AVE. LT & RT	0.500	010	
925+13	TO	927+33	USH 53 SB RT TURN	0.400	010	
ITEM TOTAL				0.900		

SEEDING MIXTURE NO. 20					630.0120	
STATION	TO	STATION	LOCATION	LBS.	CATEGORY	
26+50	TO	27+78	BALDWIN AVE. LT & RT	13	010	
925+13	TO	927+33	USH 53 SB RT TURN	12	010	
ITEM TOTAL				25		

MARKERS CULVERT END					633.5200	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
925+30			USH 53 SB LT	2	010	
ITEM TOTAL				2		

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIGN DESCRIPTION	WIDTH (INCHES)	HEIGHT (INCHES)	637.2210 SIGNS, TYPE II, REFLECTIVE H (S.F.)	637.2220 SIGNS, TYPE II, REFLECTIVE SH (S.F.)	634.0612 WOOD POSTS, 4X6-INCH X 12 FT (EACH)	634.0614 WOOD POSTS, 4X6-INCH X 14 FT (EACH)	634.0620 WOOD POSTS, 4X6-INCH X 20 FT (EACH)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)
1001	924+58	LT	W5-56	END OF ROAD MARKERS	18	18		2.25	1				
1002	924+73	LT	W5-56	END OF ROAD MARKERS	18	18		2.25	1				
1003	925+25	LT	W5-56	END OF ROAD MARKERS	18	18		2.25	1				
1004	925+44	LT	W5-56	END OF ROAD MARKERS	18	18		2.25	1				
1005	924+45	LT	R1-1	STOP	18	18	2.25		1				
1006	924+45	LT	D11-8	SNOWMOBILE-ATV ROUTE	24	18	3.00			1			
1007	924+75	LT	D11-8	SNOWMOBILE-ATV ROUTE	24	18	3.00			1			
1008	924+83	LT	D11-8	SNOWMOBILE-ATV ROUTE	24	18	3.00			1			
1009	925+13	LT	D11-8	SNOWMOBILE-ATV ROUTE	24	18	3.00			1			
1010	924+76	LT	R1-1	STOP	18	18	2.25		1				
1011	923+85	RT	R4-7	KEEP RIGHT	24	30	5.00				1		
1012	924+60	RT	R4-7	KEEP RIGHT	24	30	5.00				1		
2001	924+25	LT	R1-1	STOP								1	1
2002	924+35	LT	W5-56	END OF ROAD MARKERS								1	1
2003	924+41	LT	W5-56	END OF ROAD MARKERS								1	1
2004	924+49	LT	W5-56	END OF ROAD MARKERS								1	1
2005	924+55	LT	W5-56	END OF ROAD MARKERS								1	1
2006	924+61	LT	W5-56	END OF ROAD MARKERS								1	1
2007	924+85	LT	D11-10	ATV ROUTE								1	1
SUB-TOTAL							26.50	9.00	6	4	2	7	7

FIELD OFFICE TYPE B					642.5001	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
923+27	TO	927+68	USH 53	1	010	
ITEM TOTAL				1		

TRAFFIC CONTROL (PROJECT)					643.0100	
STATION	TO	STATION	LOCATION	EACH	CATEGORY	
923+27	TO	927+68	USH 53	1	010	
ITEM TOTAL				1		

TRAFFIC CONTROL DRUMS						643.0300	
STATION	TO	STATION	LOCATION	EACH	DAYS	DAYS	CATEGORY
864+45	TO	923+90	USH 53 NB LANE CLOSURE	20	3	60	010
923+00	TO	981+90	USH 53 SB LANE CLOSURE	20	7	140	010
ITEM TOTAL						200	

TRAFFIC CONTROL BARRICADES TYPE III						643.0420	
STATION	TO	STATION	LOCATION	EACH	DAYS	DAYS	CATEGORY
26+00			BALDWIN AVENUE CLOSURE	5	25	125	010
864+45	TO	923+90	USH 53 NB LANE CLOSURE	1	3	3	010
923+00	TO	981+90	USH 53 SB LANE CLOSURE	1	7	7	010
ITEM TOTAL						135	

TRAFFIC CONTROL WARNING LIGHTS TYPE A						643.0705	
STATION	TO	STATION	LOCATION	EACH	DAYS	DAYS	CATEGORY
26+00			BALDWIN AVENUE CLOSURE	6	25	150	010
864+45	TO	923+90	USH 53 NB LANE CLOSURE	2	3	6	010
923+00	TO	981+90	USH 53 SB LANE CLOSURE	2	7	14	010
ITEM TOTAL						170	

TRAFFIC CONTROL WARNING LIGHTS TYPE C						643.0715	
STATION	TO	STATION	LOCATION	EACH	DAYS	DAYS	CATEGORY
864+45	TO	923+90	USH 53 NB LANE CLOSURE	6	3	18	010
923+00	TO	981+90	USH 53 SB LANE CLOSURE	6	7	42	010
ITEM TOTAL						60	

TRAFFIC CONTROL ARROW BOARDS						643.0800	
STATION	TO	STATION	LOCATION	EACH	DAYS	DAYS	CATEGORY
864+45	TO	923+90	USH 53 NB LANE CLOSURE	2	3	6	010
923+00	TO	981+90	USH 53 SB LANE CLOSURE	2	7	14	010
ITEM TOTAL						20	

TRAFFIC CONTROL SIGNS						643.0900	
STATION	TO	STATION	LOCATION	EACH	DAYS	DAYS	CATEGORY
26+00			BALDWIN AVENUE CLOSURE	1	25	25	010
864+45	TO	923+90	USH 53 NB LANE CLOSURE	9	3	27	010
923+00	TO	981+90	USH 53 SB LANE CLOSURE	9	7	63	010
ITEM TOTAL						115	

3

PAVEMENT MARKING EPOXY 4-INCH				646.0106	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
50+50	TO	62+50	CTH A	2400	010
918+14	TO	923+84	USH 53 NB	570	010
ITEM TOTAL				2970	

PAVEMENT MARKING SAME DAY EPOXY 4-INCH				646.0406	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
50+50	TO	62+50	CTH A	270	010
ITEM TOTAL				270	

REMOVING PAVEMENT MARKINGS				646.0600	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
918+14	TO	918+79	USH 53 NB TAPER	65	010
919+97	TO	923+86	USH 53 NB LANE LINE	389	010
923+27	TO	923+73	USH 53 SB TAPER LT	46	010
926+73	TO	927+67	USH 53 SB TAPER LT	95	010
ITEM TOTAL				595	

CONSTRUCTION STAKING SUBGRADE				650.4500	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
26+50	TO	27+50	BALDWIN AVE	100	010
ITEM TOTAL				100	

CONSTRUCTION STAKING BASE				650.5000	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
26+50	TO	27+50	BALDWIN AVE	100	010
ITEM TOTAL				100	

CONSTRUCTION STAKING RESURFACING REFERENCE				650.8000	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
918+17	TO	923+67	USH 53 NB TURN LANE LT	550	010
923+33	TO	927+33	USH 53 SB TURN LANE LT	400	010
ITEM TOTAL				950	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT)				650.9910	
STATION	TO	STATION	LOCATION	L.S.	CATEGORY
923+27	TO	927+68	USH 53	1	010
ITEM TOTAL				1	

CONSTRUCTION STAKING SLOPE STAKES				650.9920	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
923+00	TO	928+00	USH 53 SB	500	010
26+50	TO	27+50	BALDWIN AVE.	100	010
ITEM TOTAL				600	

SAWING ASPHALT				690.0150	
STATION	TO	STATION	LOCATION	L.F.	CATEGORY
923+27	TO	927+67	USH 53 SB RT TURN LANE	440	010
918+48	TO	923+71	USH 53 NB LT TURN LANE	523	010
		26+50	BALDWIN AVE	22	010
ITEM TOTAL				985	

3

Division	From/To Station	Location	Common Excavation (I) (Item # 205.0100)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Reduced EBS In Fill (9)	Expanded EBS Backfill (II)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	Borrow (Item #208.0100)	Comment:
			Cut (2)	EBS Excavation (3)			Factor 0.80	Factor 1.30		Factor 1.25				
1	923+00 to 928+00	USH 53 SB	109	0	36	73	0	0	0	0	72			
Division 1 Subtotal			109	0	36	73	0	0	0	0	72			
2	26+50 to 27+39	BALDWIN AVE.	48	0	28	20	0	0	617	771	-751			
Division 2 Subtotal			48	0	28	20	0	0	617	771	-751		679	See Note 15
Grand Total			156	0	63	93	0	0	617	772	-679	0	679	
			Total Common Exc		156									

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unusable Pavement Material is Included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500
7) Rock Excavation Item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.11
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.11
12) Expanded Rock - Factor = 1.1.
13) Expanded Fill. Factor = 1.25
Depending on selections:
Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced EBS) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor - Reduced Marsh) * Fill Factor
Or Expanded Fill = (Unexpanded Fill - Rock * Rock Factor) * Fill Factor
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
15) Use 113,641 CY of material from Division 1. Borrow Excavation Item number 208.0100

NOT TO SCALE SHEET LOCATION PROJECT OVERVIEW

V I L L A G E

SW-SW
SEC 26

OF

S O L O N S P R I N G S

SE-SW
SEC 26

1005
FOUND 3/4" IRON PIPE
Y = 168588.12
X = 215811.25

NE-NW
SEC 35

S O L O N S P R I N G S

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DOUGLAS COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY $\frac{3}{4}$ " X 24" REBAR WITH A WDOT CAP) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE. THE POINTS ARE INTENDED TO BE ON THE RIGHT-OF-WAY LINES BUT NOT NECESSARILY ON OR ANY PART OF A BOUNDARY, SIXTEENTH, QUARTER OR SECTION (P.L.S.S.) LINE. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 13 ESTABLISHED FROM PREVIOUS PROJECT 1198-01-28 AND
EXISTING HIGHWAY RIGHT-OF-WAY FOR BALDWIN AVENUE ESTABLISHED FROM CERTIFIED SURVEY MAP NO. 1032,
VOL. 7 PG. 203-204 IN DOUGLAS COUNTY REGISTER OF DEEDS.

EXISTING ACCESS CONTROL ALONG USH 53 ESTABLISHED FROM PREVIOUS PROJECT 1198-01-28
AND FDO DATED 12/30/1992, FDO - DOC. 340890 AND FDO - DOC. 832707

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHWEST REGIONAL OFFICE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

ALIGNMENT DATA
CUL-DE-SAC

PISTA 26+96.11
Y = 168553.91
X = 214380.62
DELTA = 35°50'44" Left
D = 40°11'32"
T = 46.11'
L = 89.19'
R = 142.55'
LCH = 87.74'
LCB = N 70°33'33" E
PC STA 26+50.00
Y = 168552.69
X = 214334.53
PT STA 27+39.19
Y = 168581.89
X = 214417.26

ALIGNMENT DATA
BALDWIN AVENUE
POB STA 125+28.56
Y = 168549.47
X = 214213.14
POE STA = 133+50.53
Y = 168571.25
X = 215034.81

ALIGNMENT DATA
USH 53 SB

POB STA 916+07.52
Y = 167755.25
X = 214785.10
PISTA 936+72.95
Y = 169759.89
X = 214287.70
DELTA = 25°56'02"
D = 1°59.42'
T = 166.32"
L = 1299.98'
R = 2872.04'
LCH = 1288.93'
LCB = N 00°05'08"
LCK = N 13°56'06"
PC STA 930+11.63
Y = 169108.03
X = 214446.96
PT STA 943+11.61
Y = 170406.72
X = 214245.18
BAH = N 11°59'56"E
POE STA 946+25.40
Y = 170713.69
X = 214290.42

COURSE TABLE		
COURSE	BEARING	DISTANCE
90000-40000	N 01°31'13" W	31.63
40000-40001	N 55°13'33" E	127.77
40001-40002	N 88°47'21" E	72.24
40002-30002	S 01°12'39" E	43.05
30002-90001	S 01°12'39" E	58.73
90001-90000	S 88°37'48" W	178.54

R/W POINT TABLE			
POINT	STATION	OFFSET	EASTING
30002	127+70.23	-58.54	21445.17
40000	125+91.37	-31.90	214275.08
40001	126+98.22	-101.97	214380.03
40002	925+63.31 (USH 53)	-105.78	214452.26


SCHEDULE OF LANDS AND INTERESTS REQUIRED			OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT			
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES REQUIRED
			NEW	EXISTING H.E.	TOTAL	
1	LYME ST. CROIX LAND COMPANY LLC	FEE	0.12	0.00	0.12	0.00

FAA
CONSULTING ENGINEERS

Fleming, Andre & Associates, Inc.
3615 N. Hastings Way • Suite 100
Eau Claire, WI 54703

I, JOHN T. MUELLER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1195-01-24-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND

DATE 10/16/2013

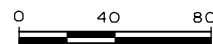

John T. Mueller

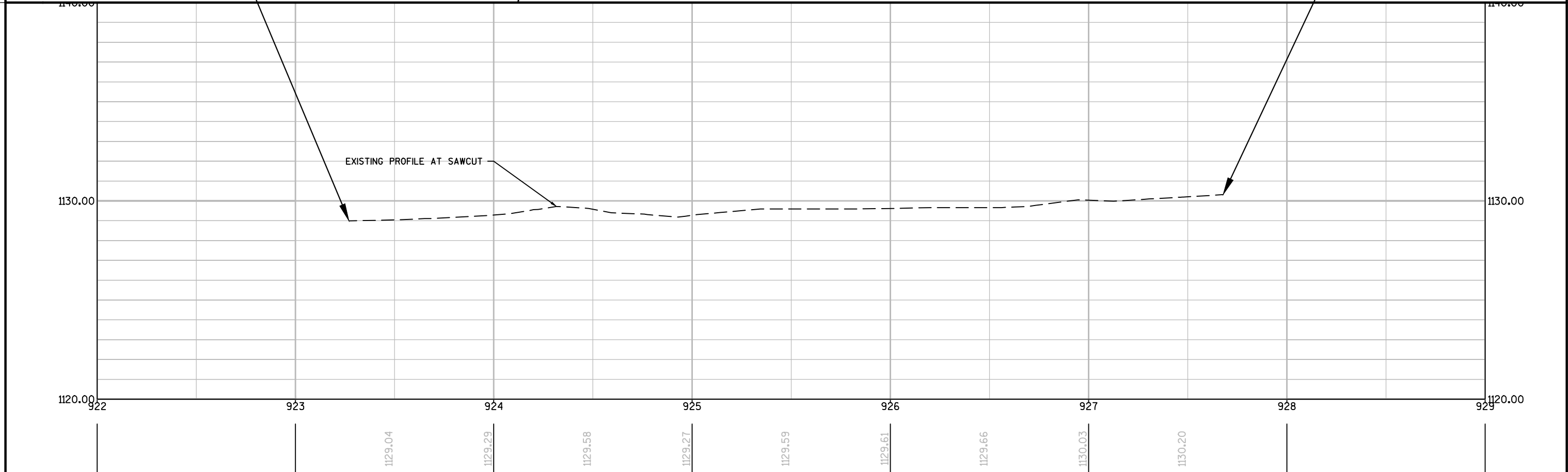
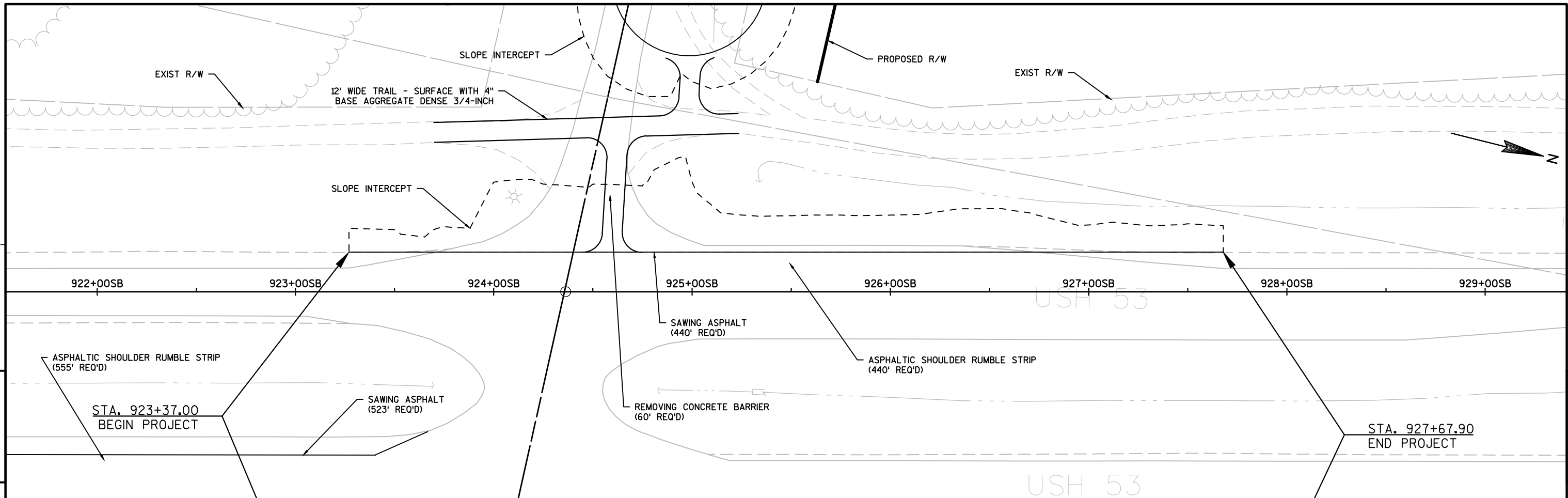
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR
THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

DATE 11/15/2013

Michael Piller
Michael Piller

SCALE, FEET

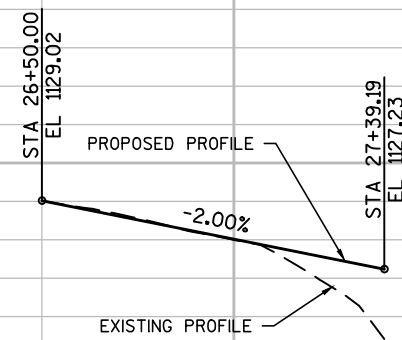
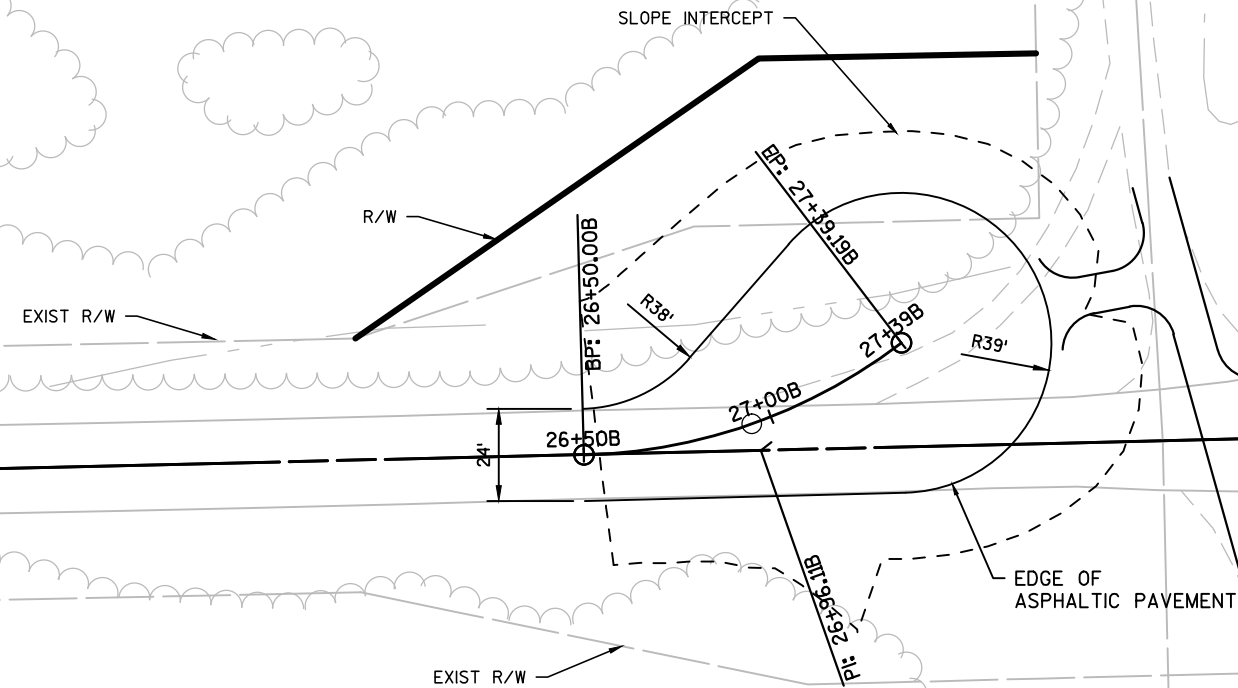




PROJECT NO:1195-01-74	HWY:USH 53	COUNTY:DOUGLAS	PLAN AND PROFILE: USH 53 SB	SHEET	E
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CURVE 2

PI STA. 26+96.11
Y : 168,553.91
X : 214,380.62
DELTA = 35° 50' 44.18"
T = 46.11'
L = 89.19'
R = 142.55'
PCC STA. 26+50.00
Y : 168,552.69
X : 214,334.53
PCC STA. 27+39.19
Y : 168,581.89
X : 214417.26



PROJECT NO:1195-01-74

HWY:USH 53

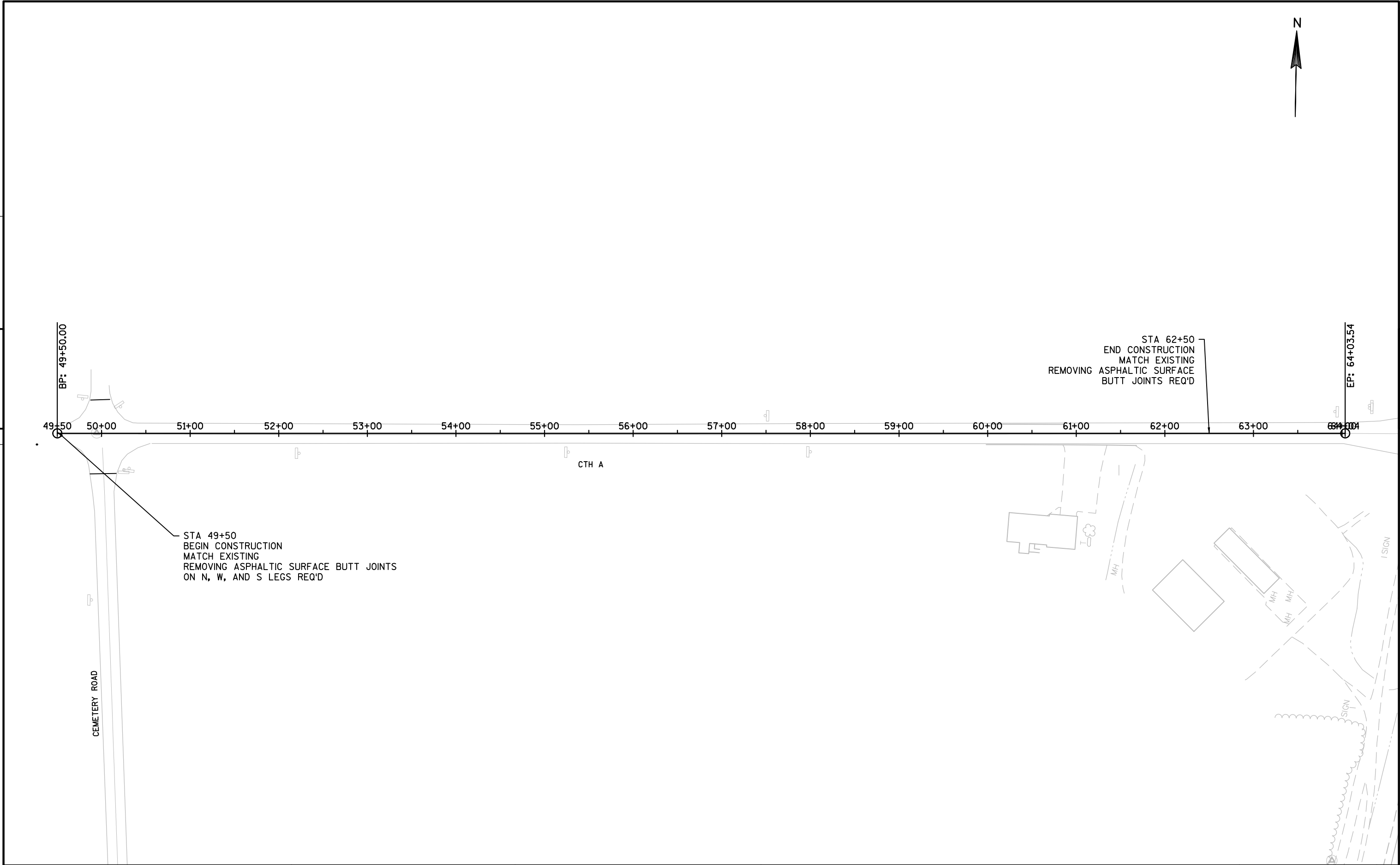
COUNTY:DOUGLAS

PLAN AND PROFILE: BALDWIN AVENUE

SHEET

E

5



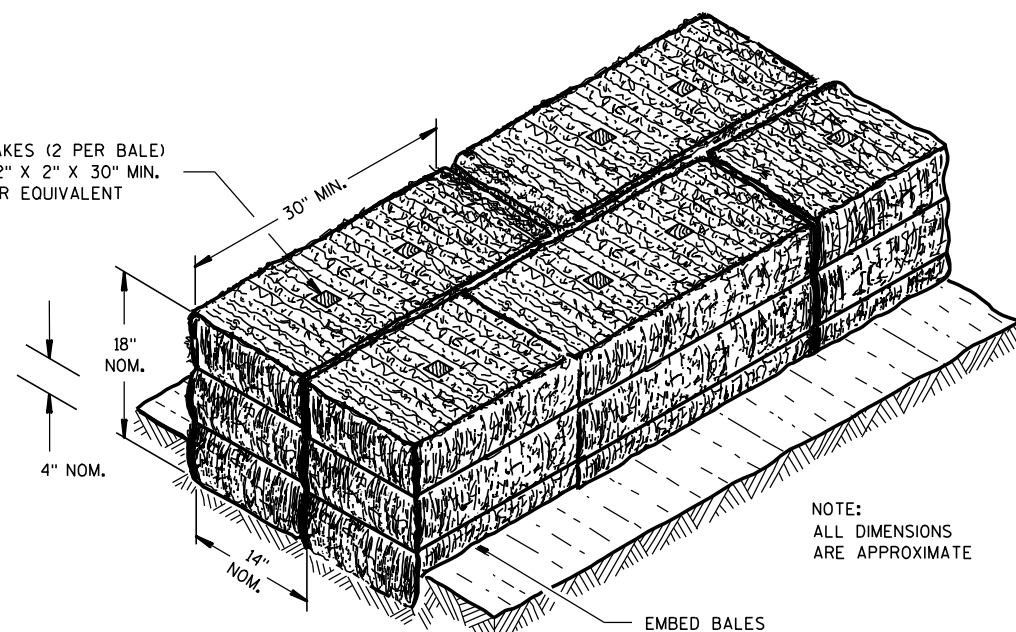
5

PROJECT NO:1195-01-74	HWY:USH 53	COUNTY:DOUGLAS	CTH A ASPHALT OVERLAY	SHEET	E
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Standard Detail Drawing List

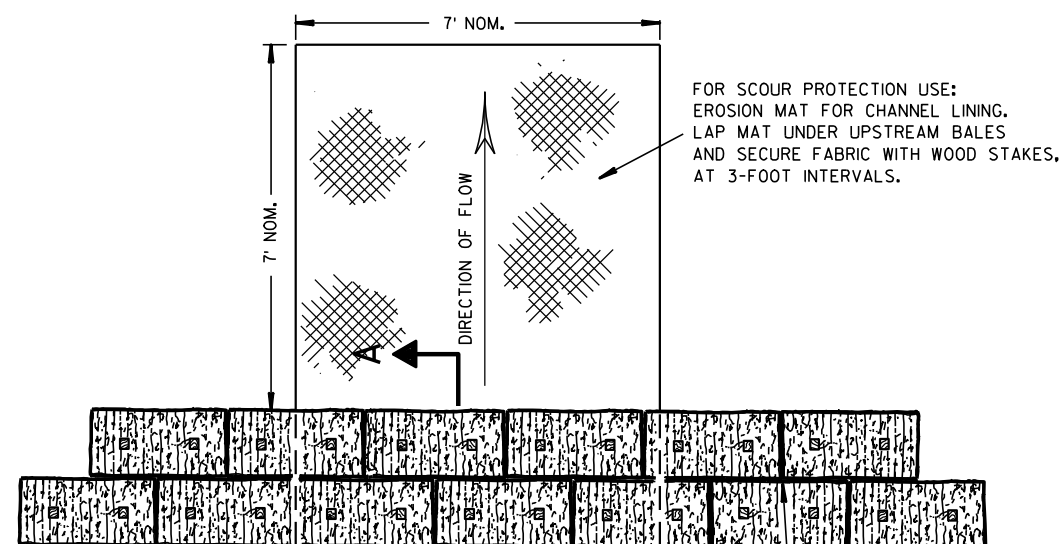
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-02B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C26-02	END-OF-ROADWAY SIGNING
15D12-03	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M. P. H.
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

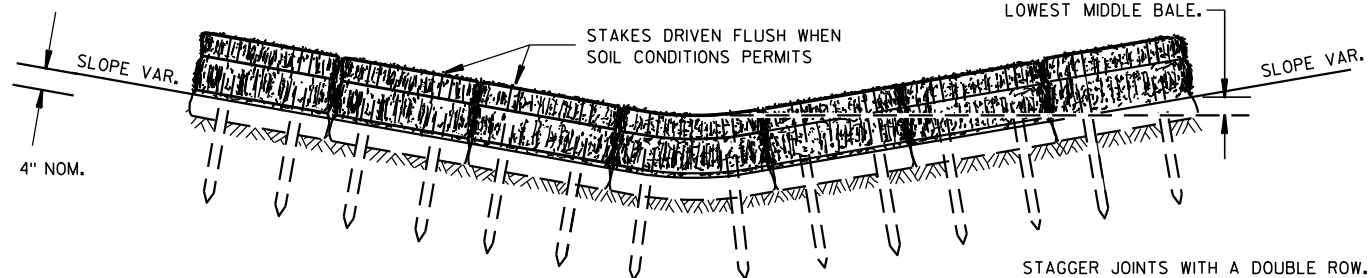
SECTION A-A



PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



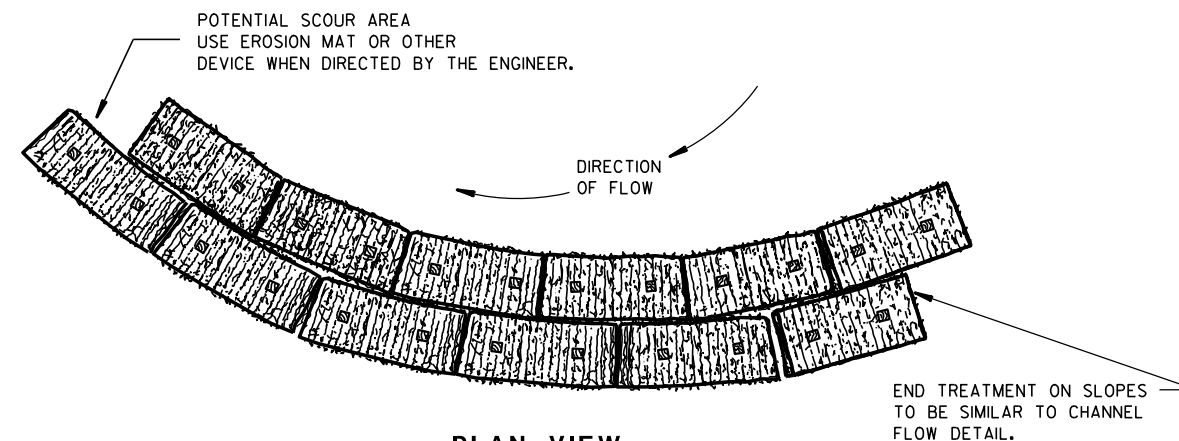
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

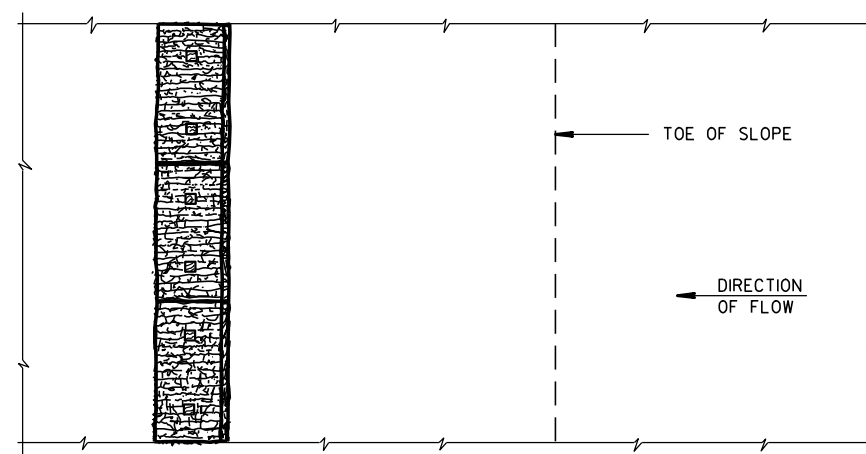
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

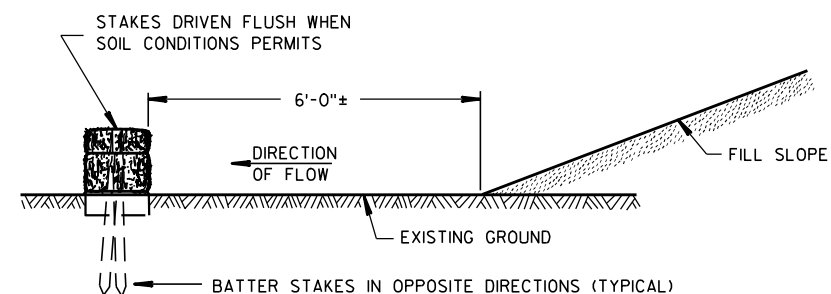


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

FHWA

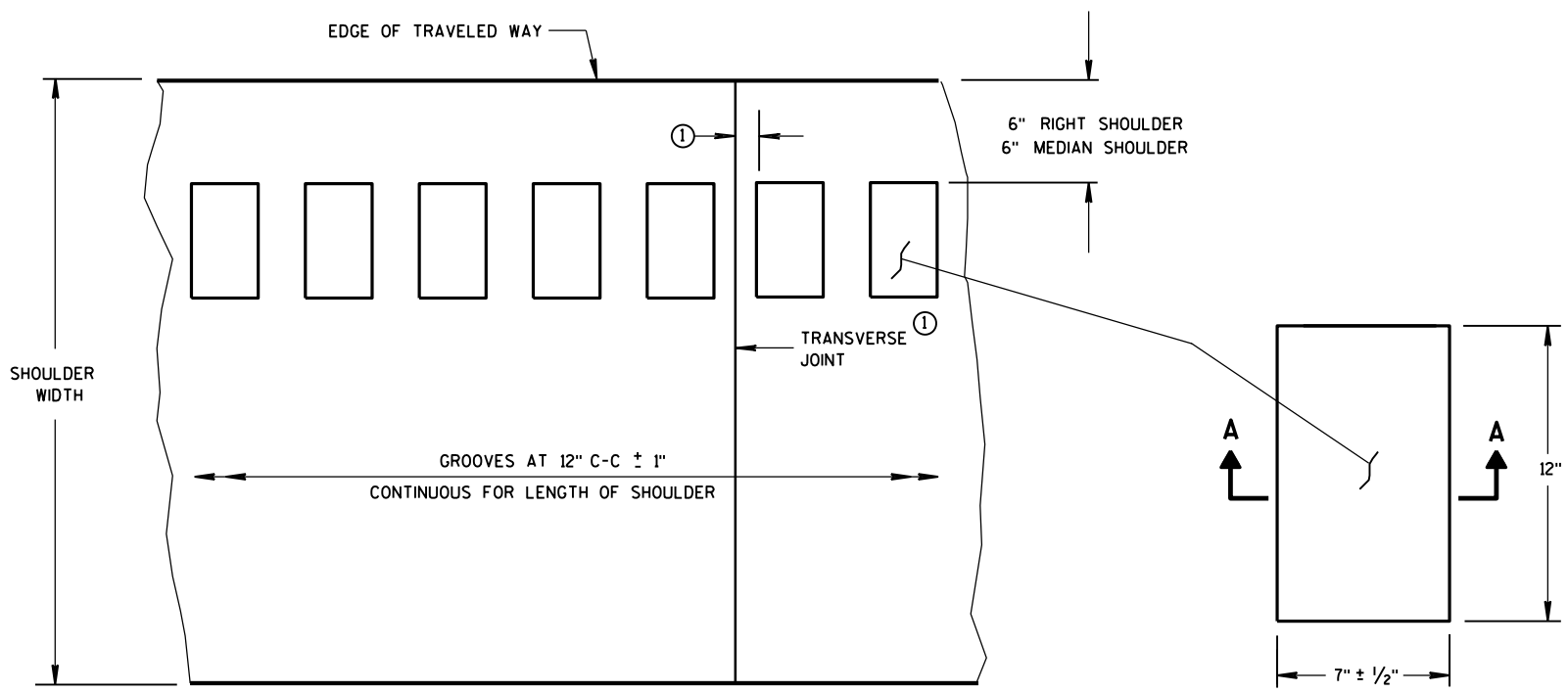
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



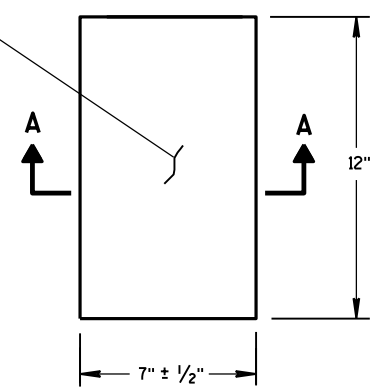
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 _____ DATE	/S/ Beth Canestra _____ CHIEF ROADWAY DEVELOPMENT ENGINEER



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

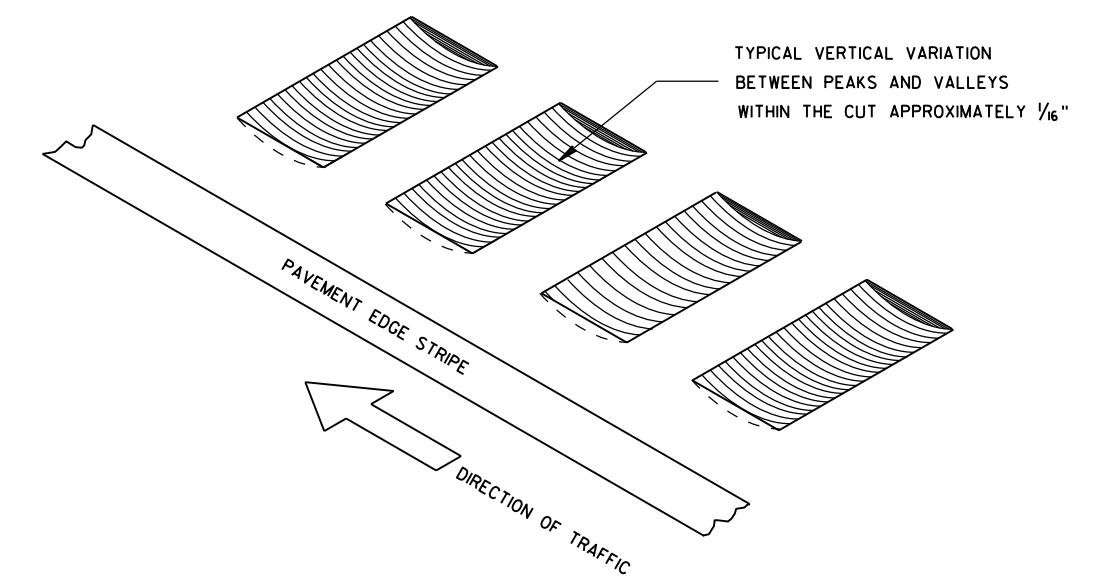
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

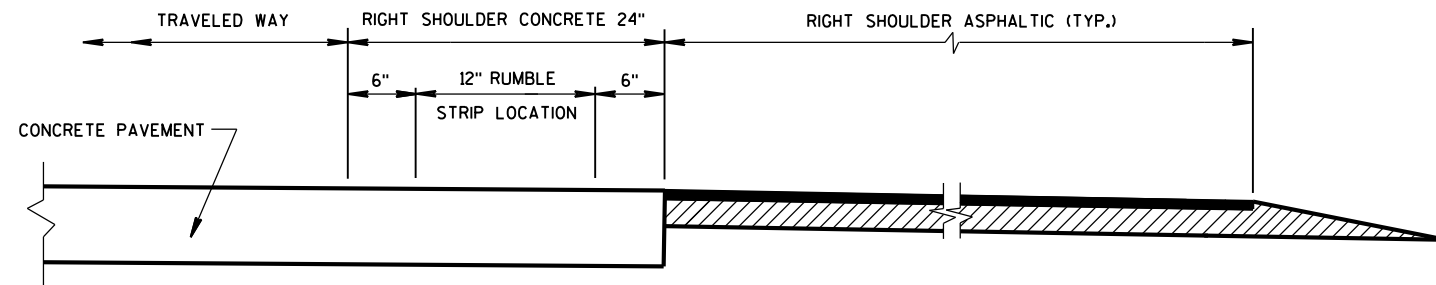
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

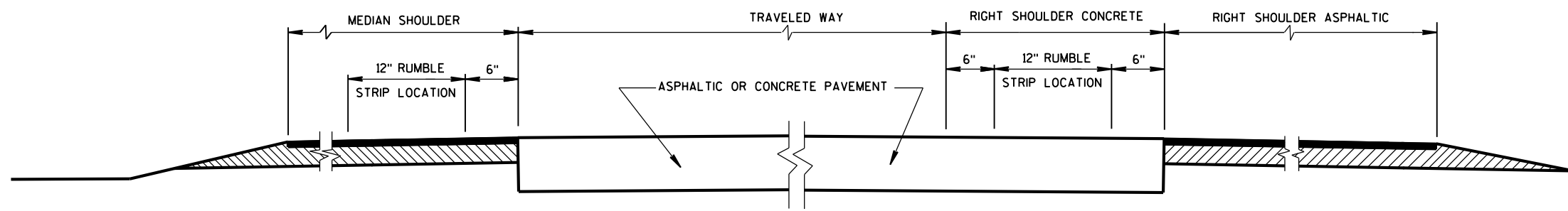
① CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



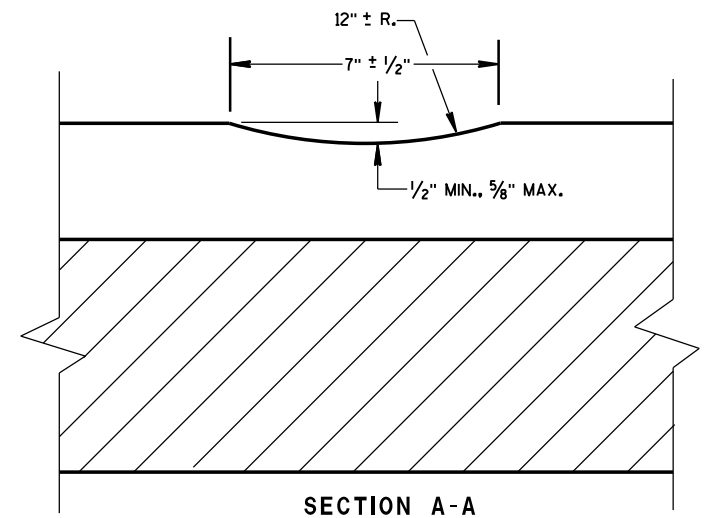
ISOMETRIC



SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



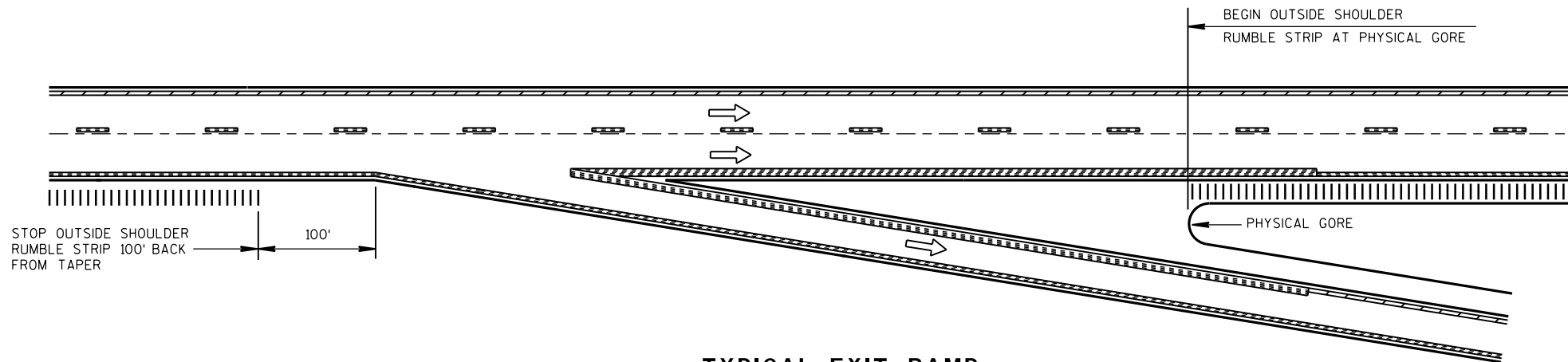
SECTION VIEW
TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS
IN RURAL DIVIDED HIGHWAYS
(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP,
MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



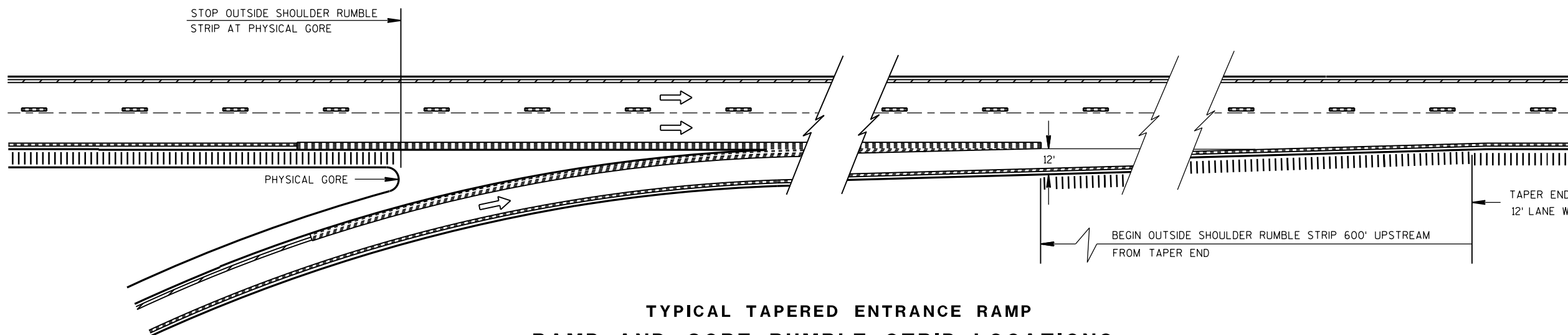
TYPICAL EXIT RAMP

NOTES:

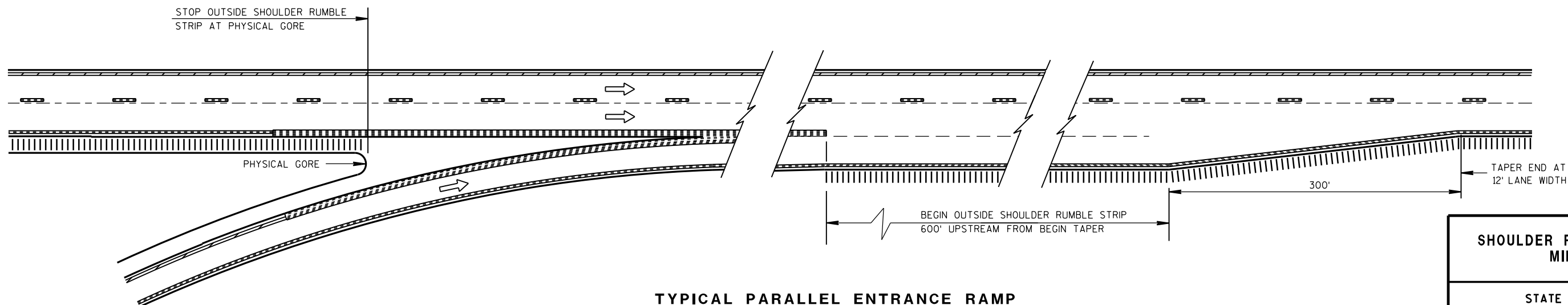
NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL



**TYPICAL TAPERED ENTRANCE RAMP
RAMP AND GORE RUMBLE STRIP LOCATIONS**



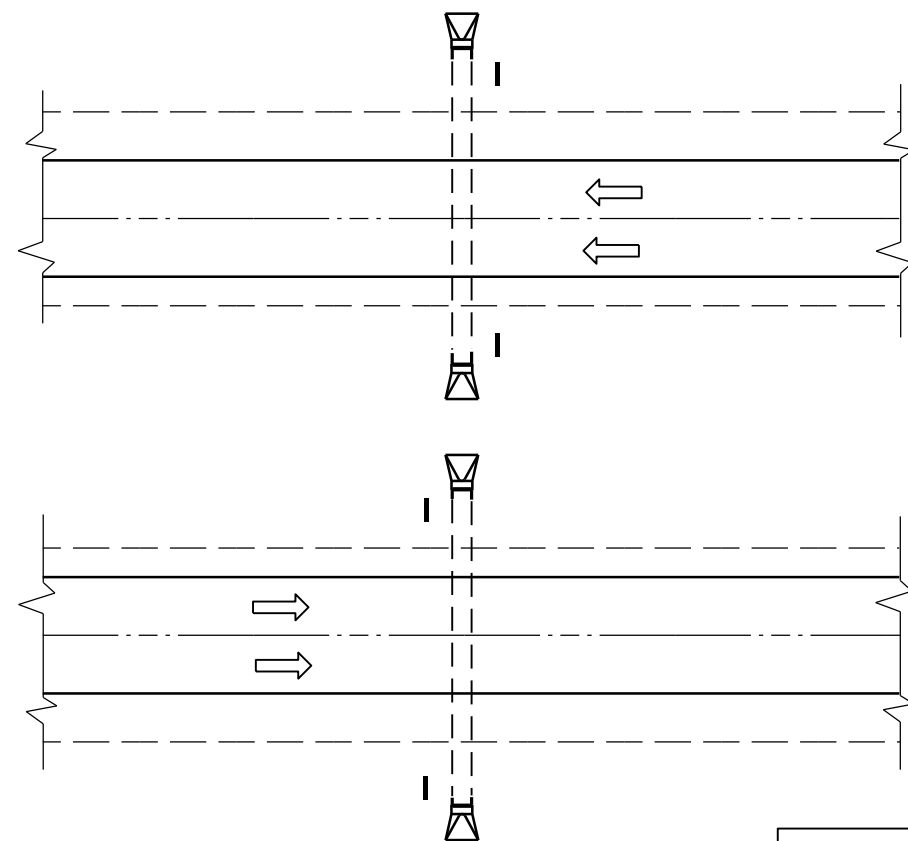
**TYPICAL PARALLEL ENTRANCE RAMP
RAMP AND GORE RUMBLE STRIP LOCATIONS**

**SHOULDER RUMBLE STRIP,
MILLING**

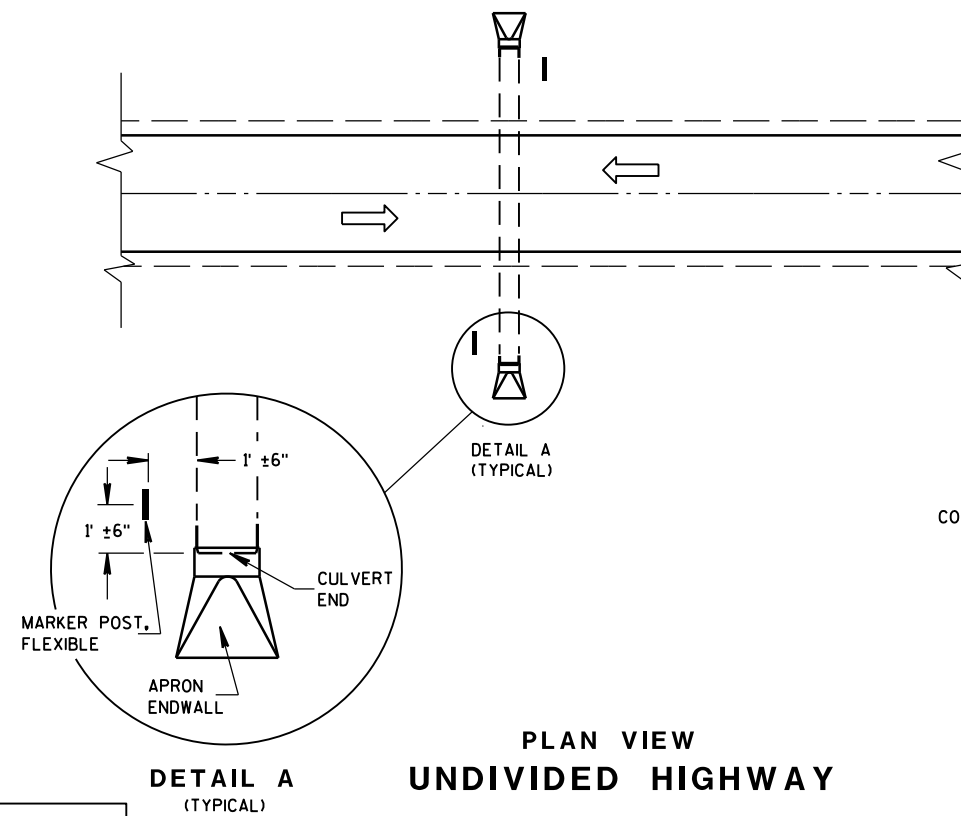
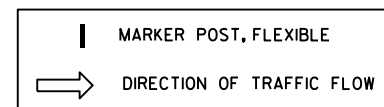
**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
12/17/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



PLAN VIEW
DIVIDED HIGHWAY

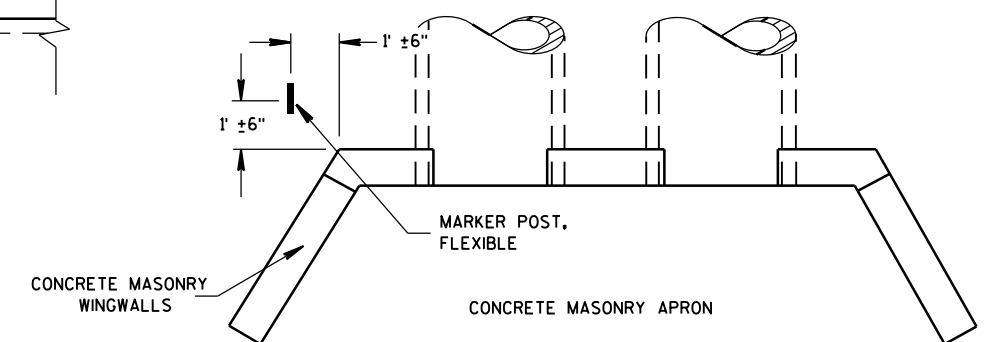


PLAN VIEW
UNDIVIDED HIGHWAY

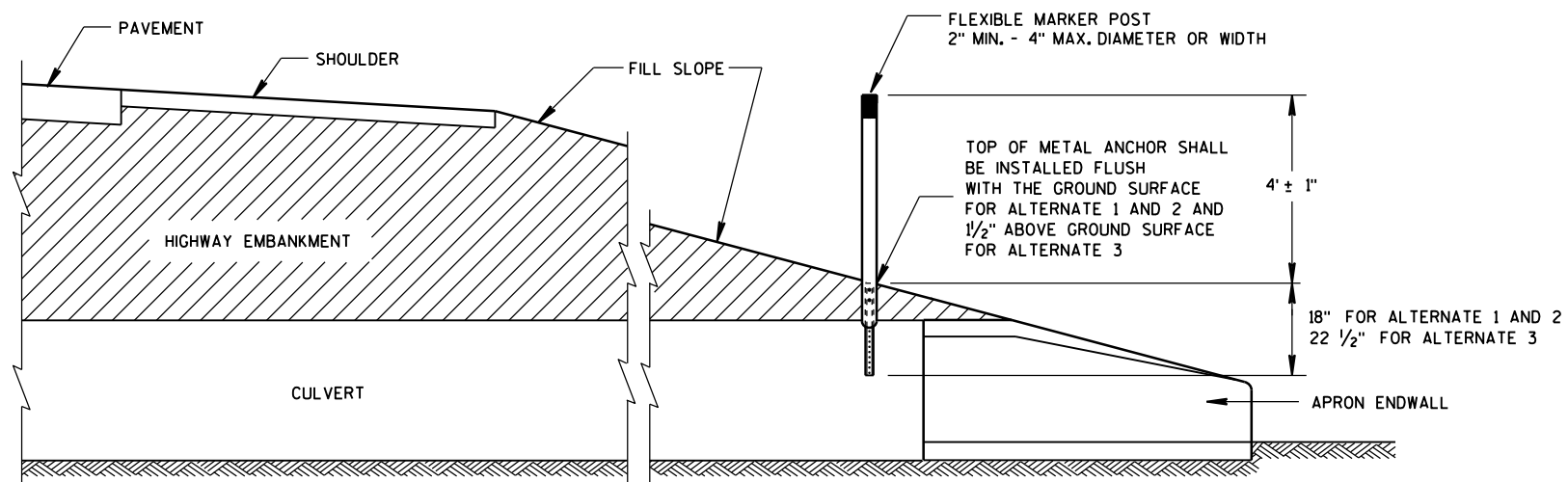
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



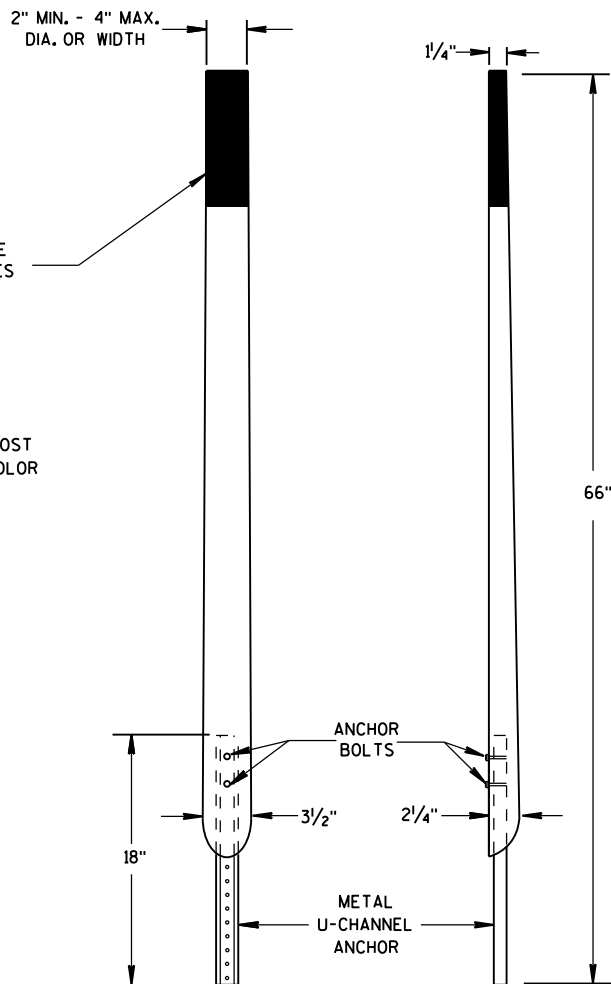
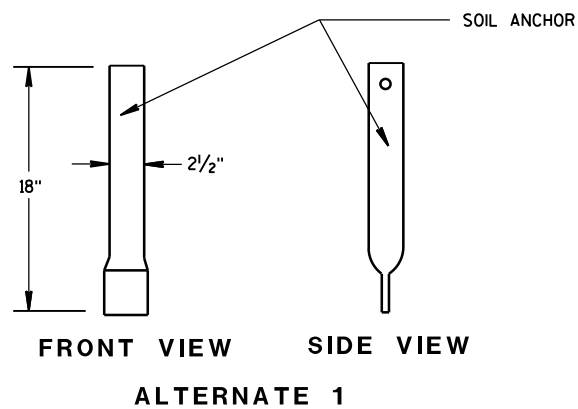
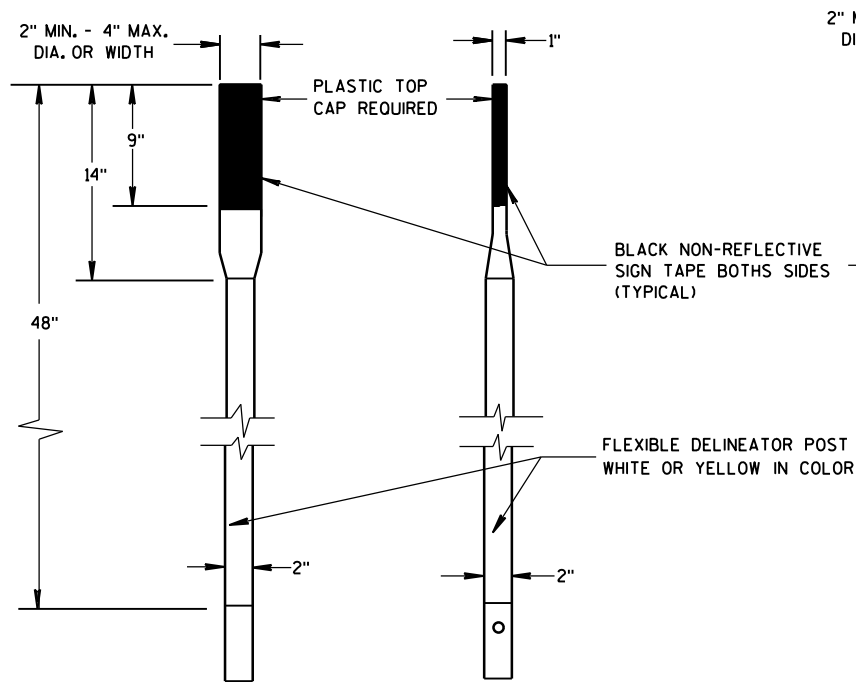
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

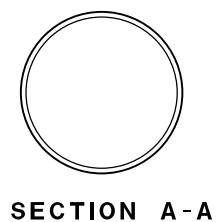
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

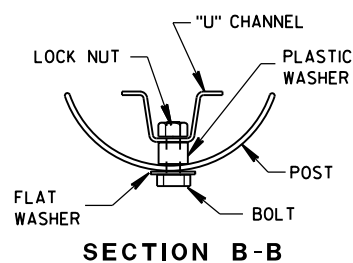
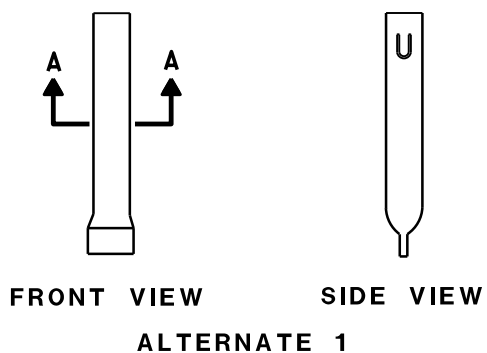


FRONT VIEW SIDE VIEW
ALTERNATE 2

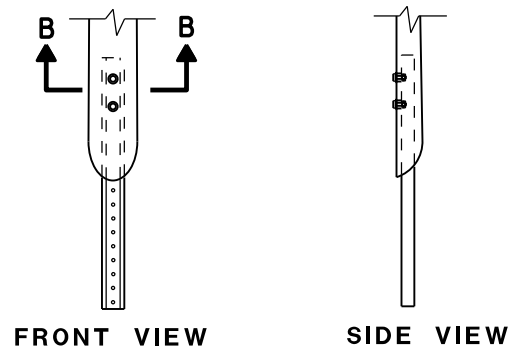
FLEXIBLE MARKER POSTS



SECTION A-A

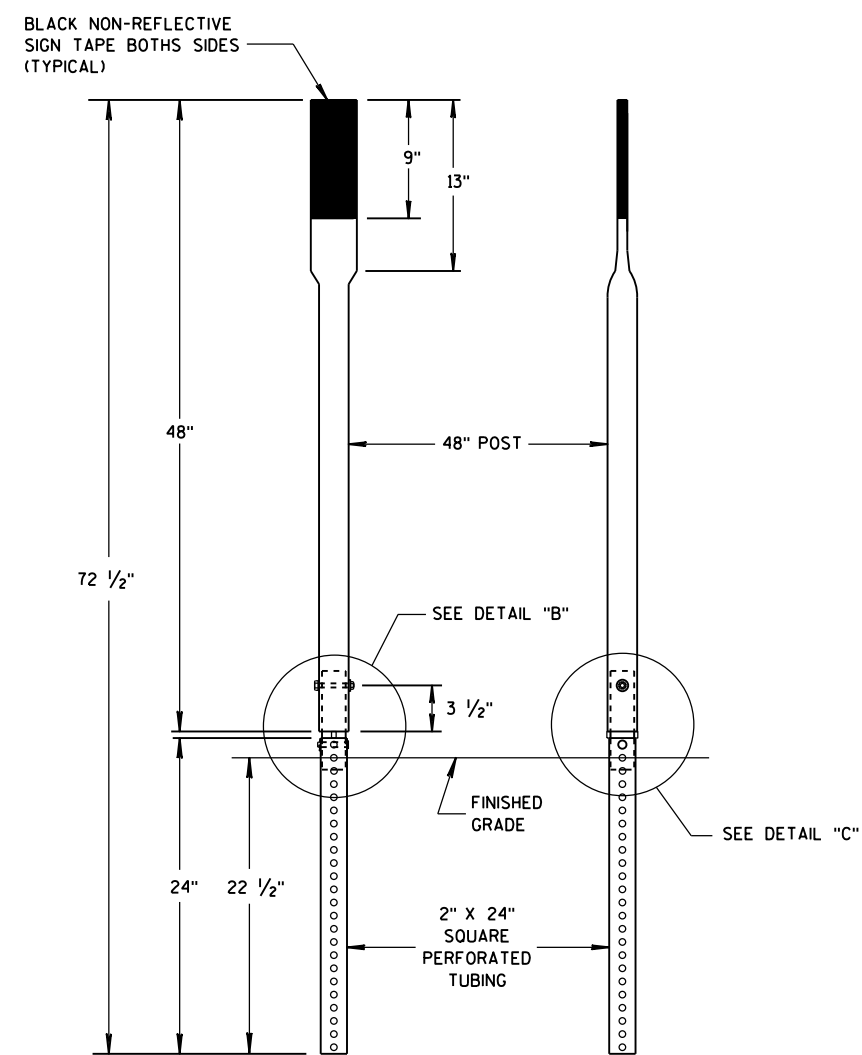


SECTION B-B

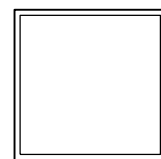


FRONT VIEW SIDE VIEW
ALTERNATE 2

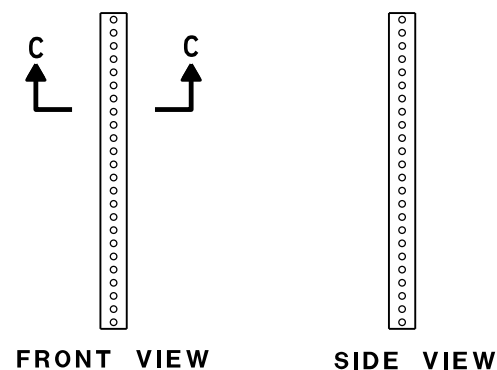
FLEXIBLE MARKER POST ANCHORS



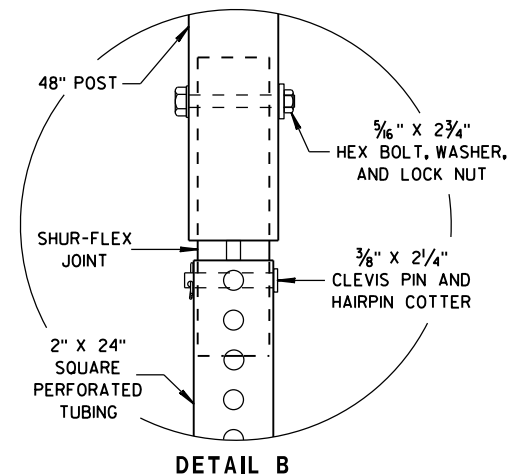
FRONT VIEW SIDE VIEW
ALTERNATE 3



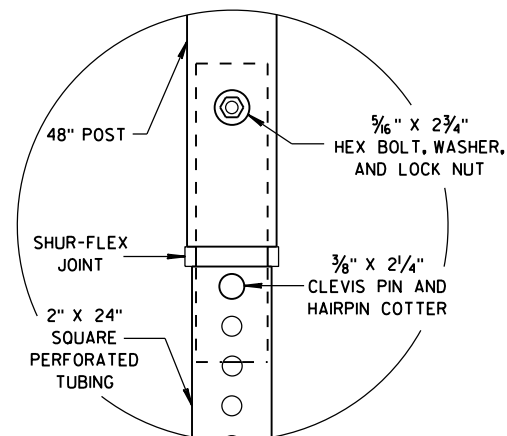
SECTION C-C



FRONT VIEW SIDE VIEW
ALTERNATE 3



DETAIL B



DETAIL C

FLEXIBLE MARKER POST FOR CULVERT END

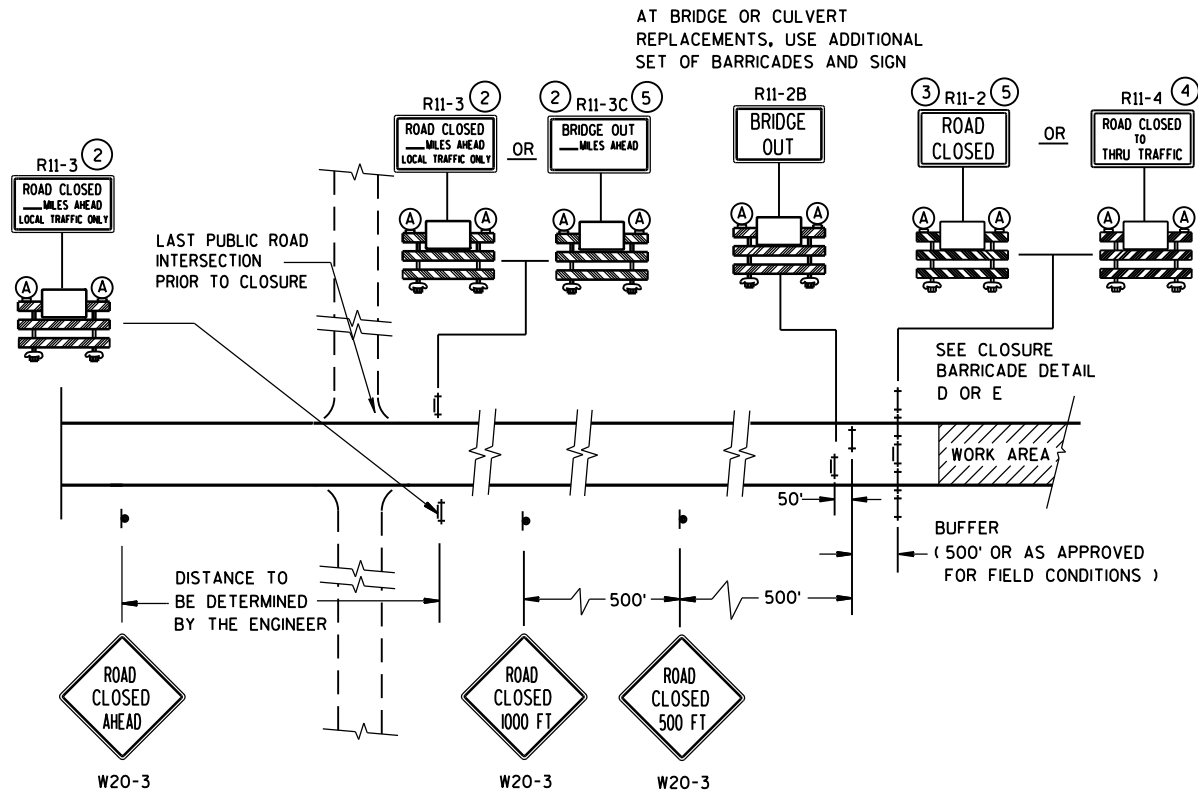
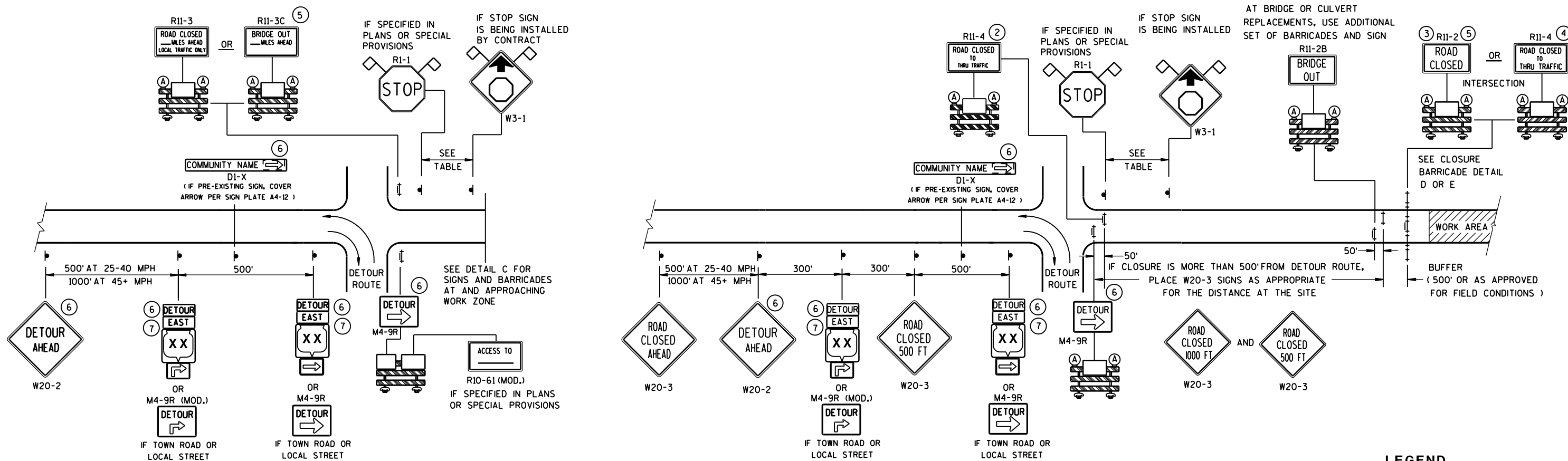
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/2012
DATE

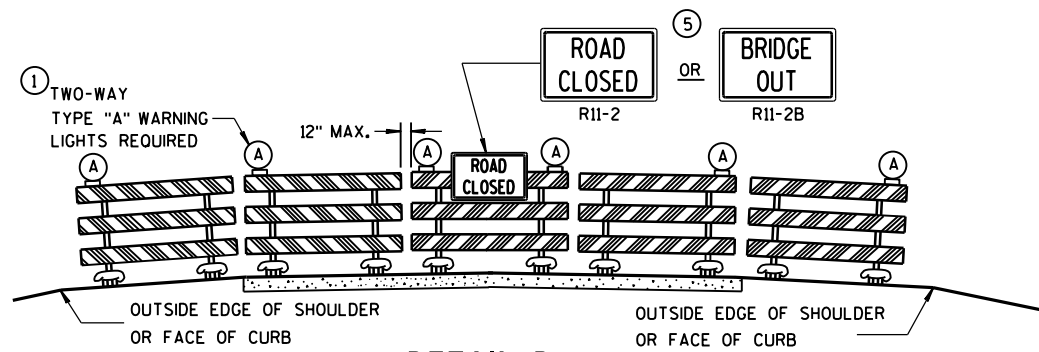
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN

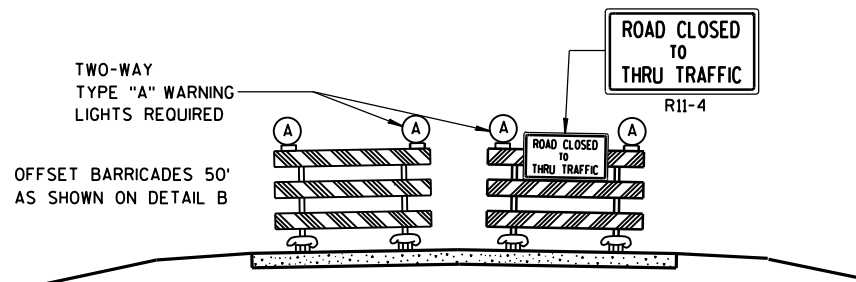


SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

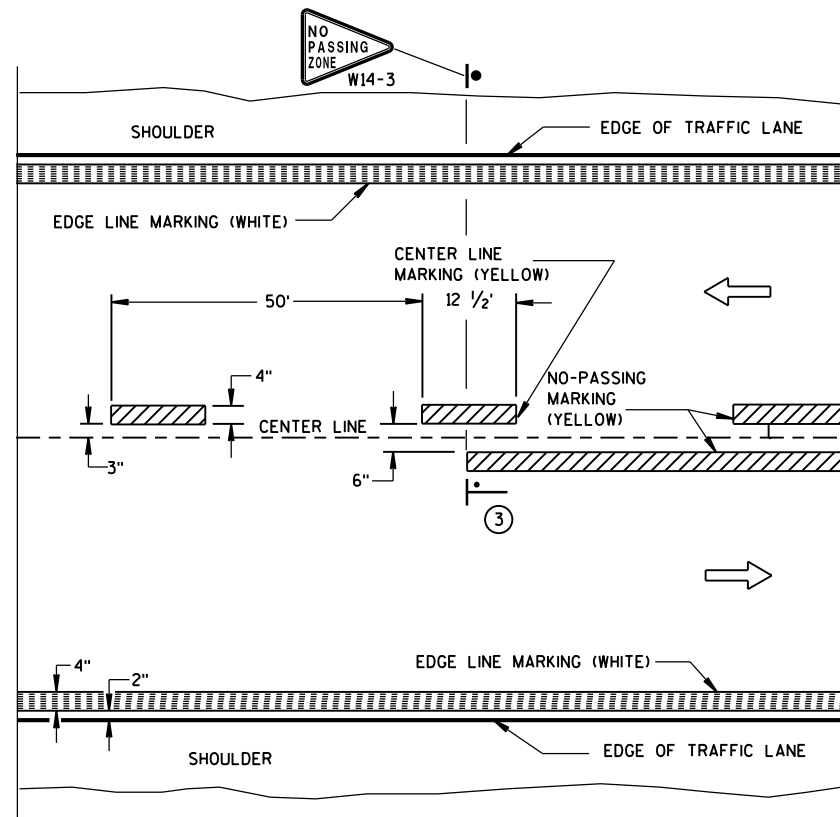
R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

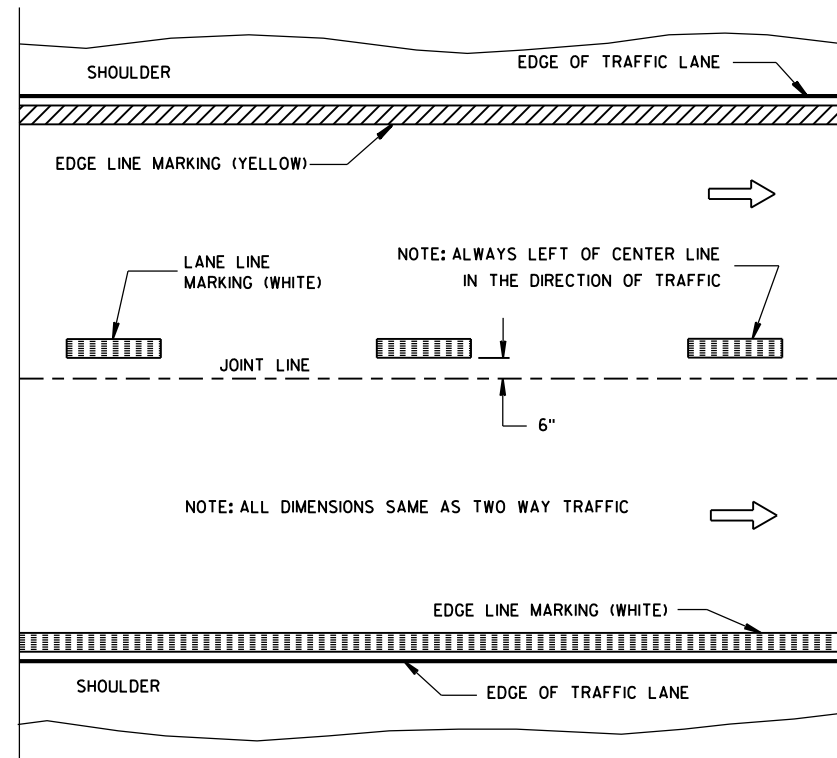
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

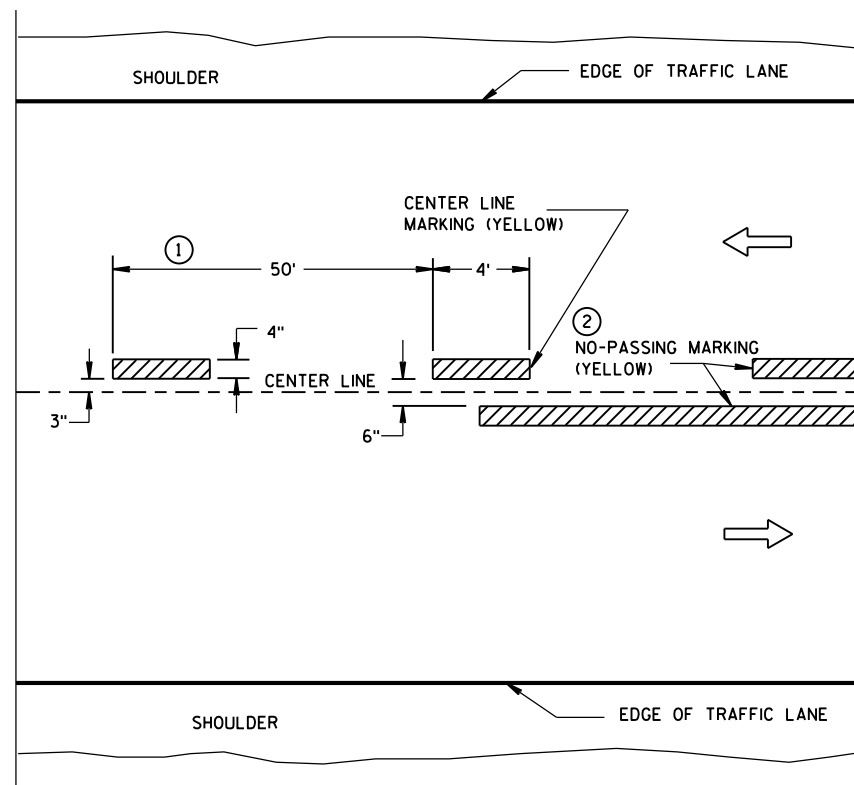


TWO WAY TRAFFIC

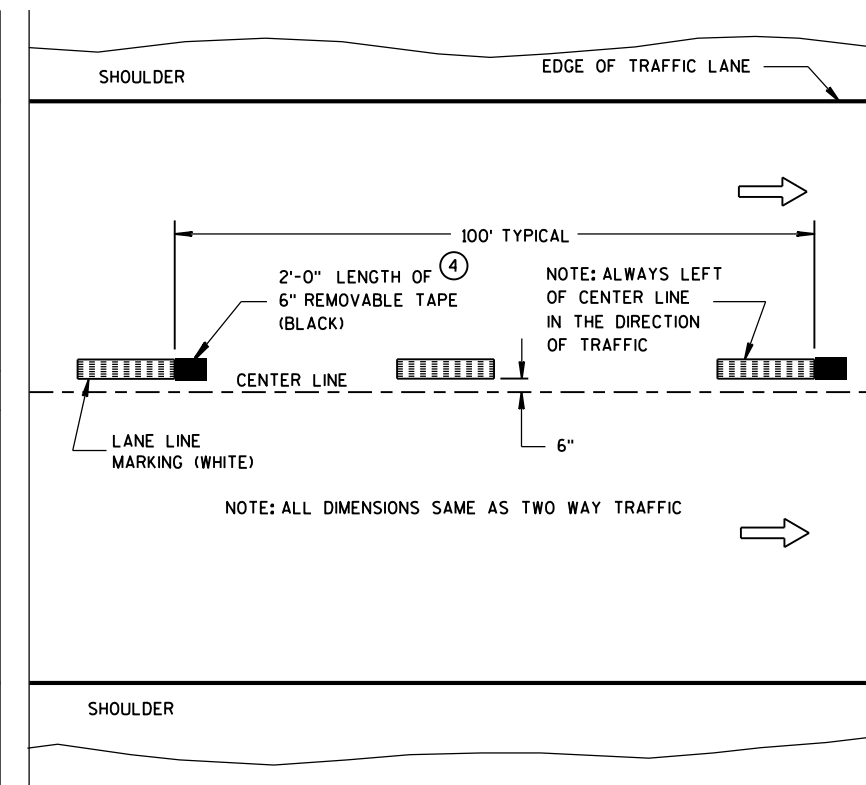


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

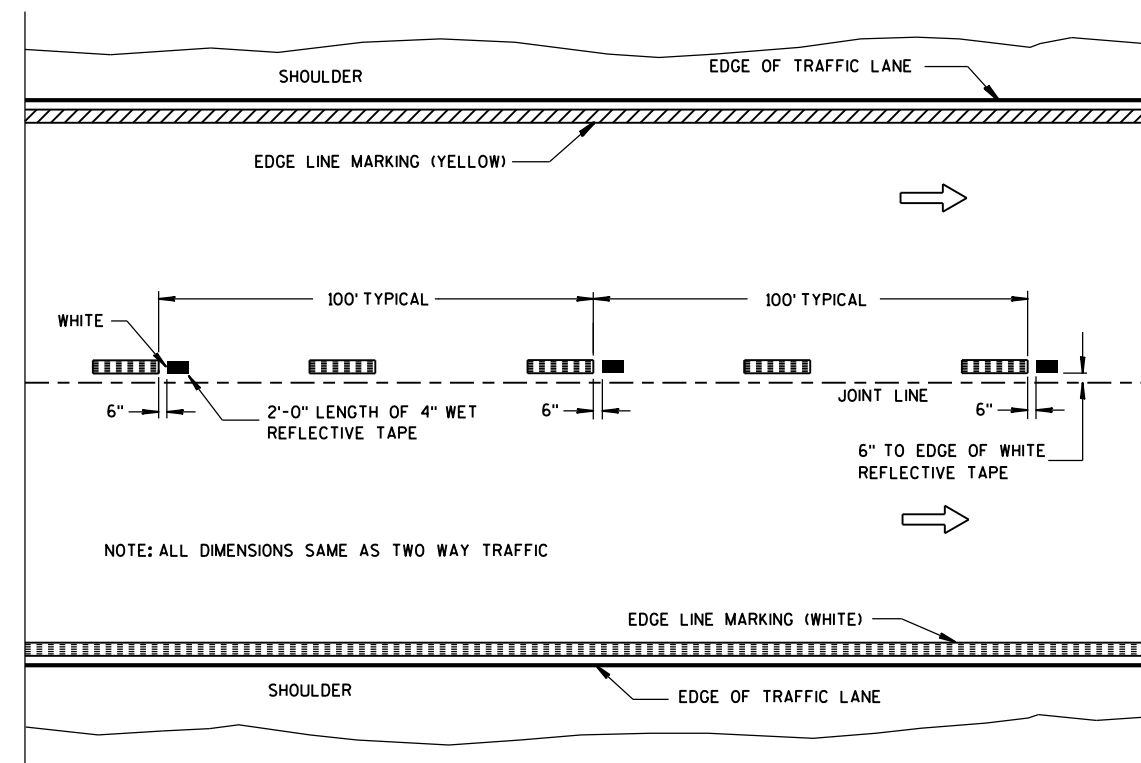
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

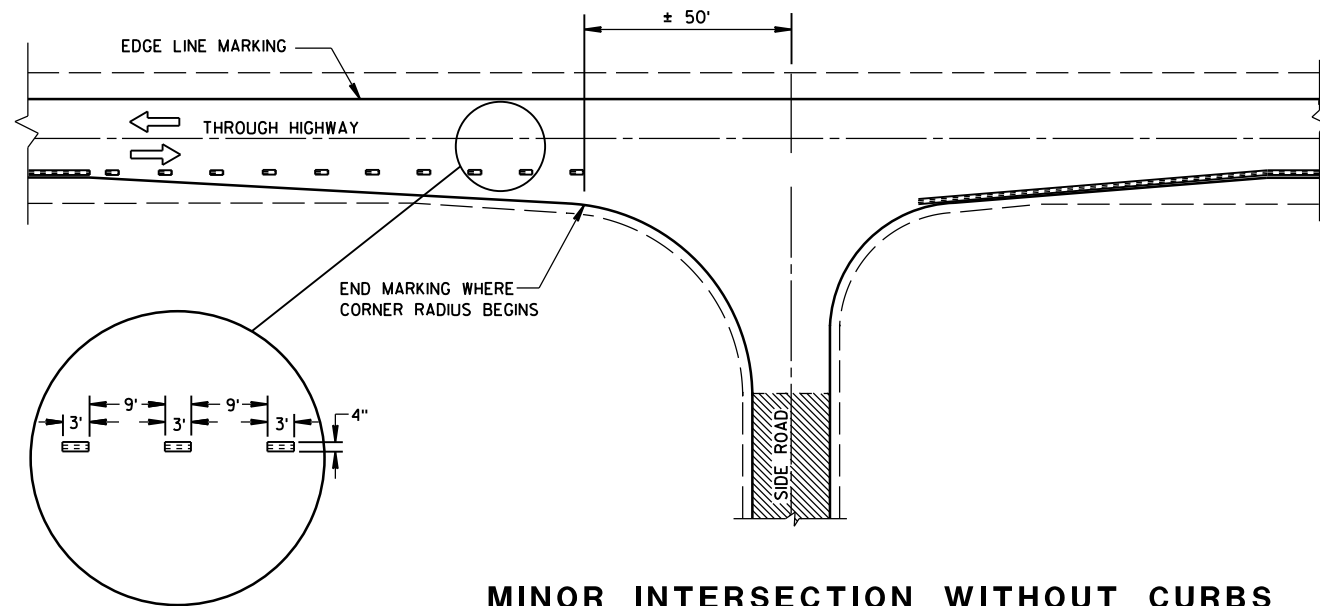
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

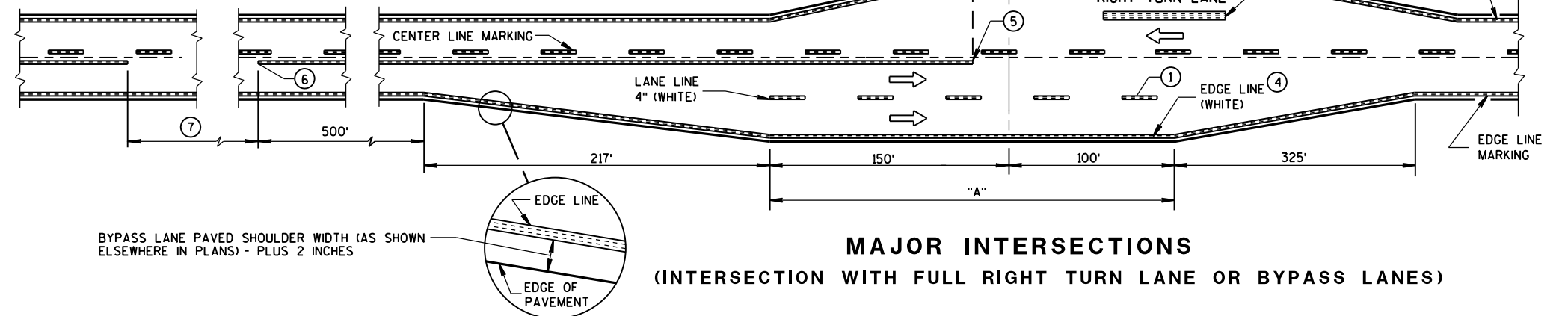
/S/ Travis Feltes
STATE TRAFFIC ENGINEER



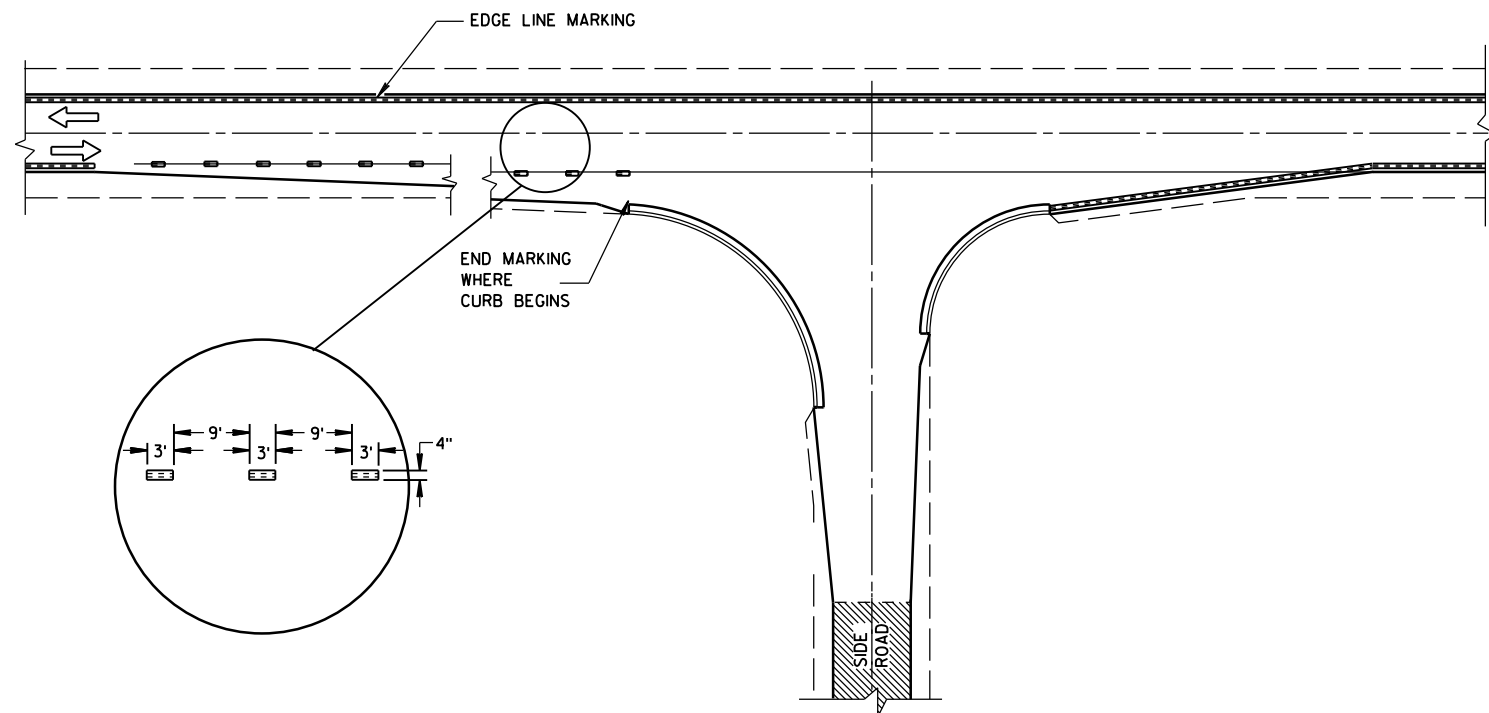
MINOR INTERSECTION WITHOUT CURBS

⑦

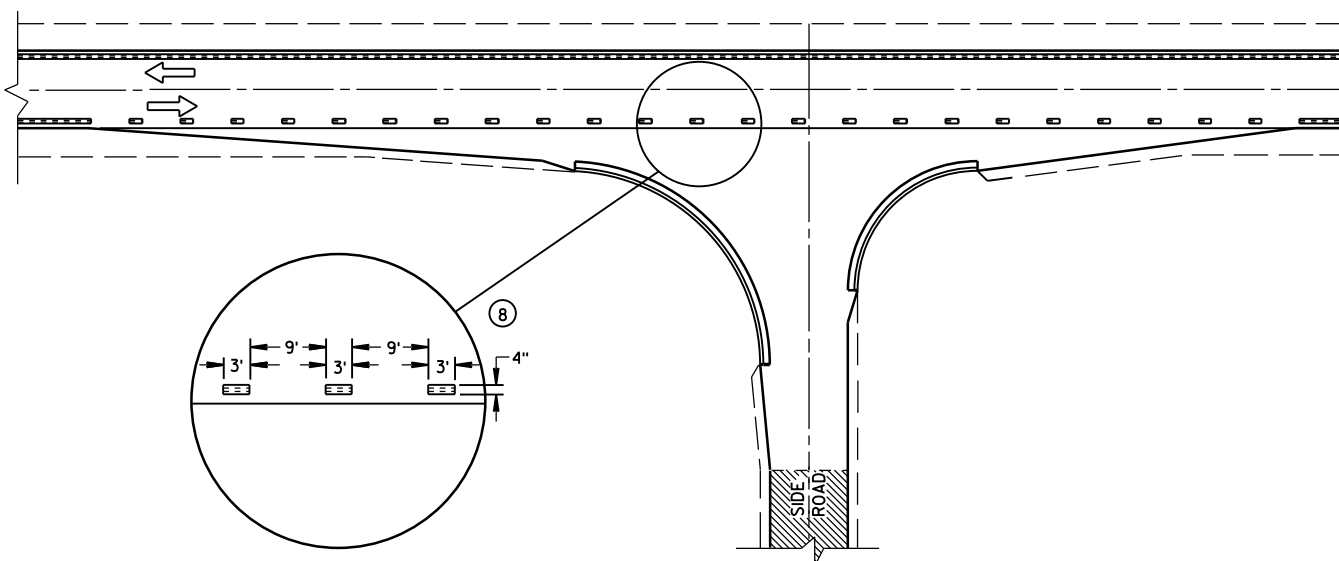
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)





GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

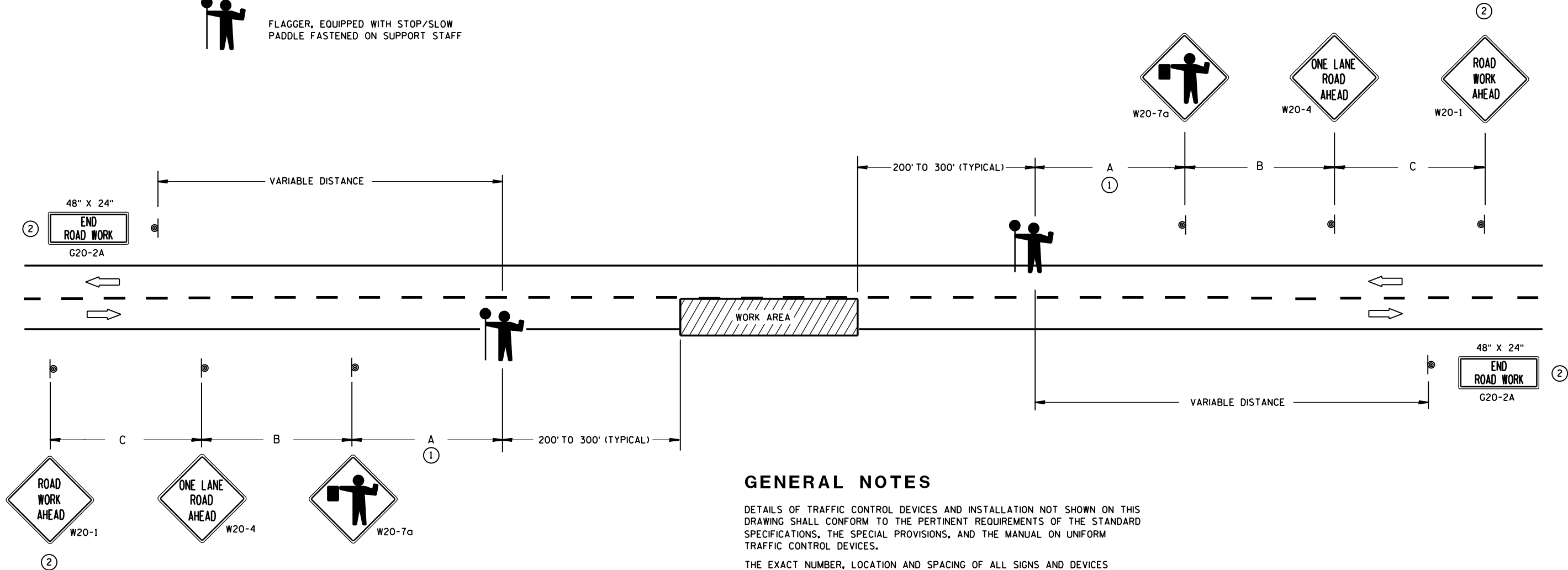
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

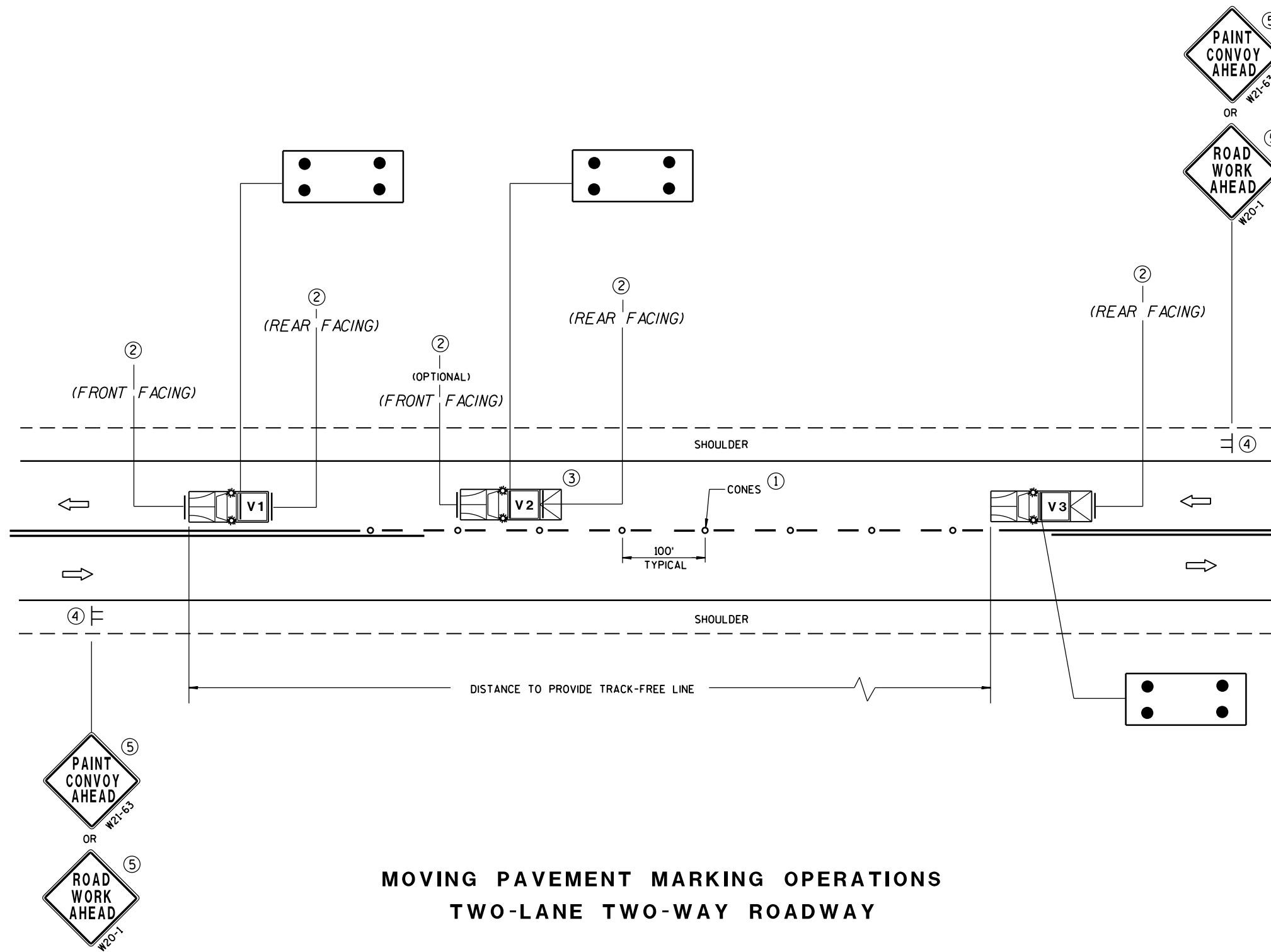
THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

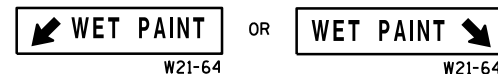
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

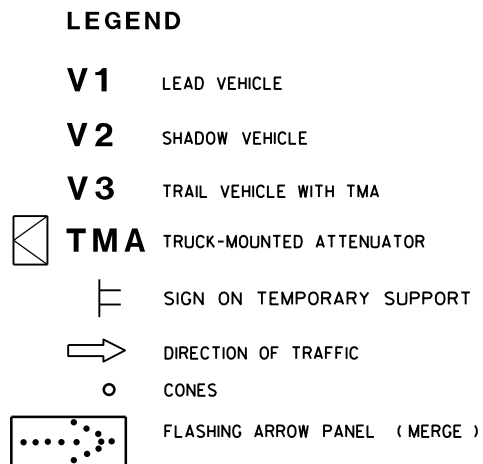
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013
DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER



ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.


USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGE LINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.


WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGETLINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.





- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER, CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.


W21-64

OR


W21-64
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

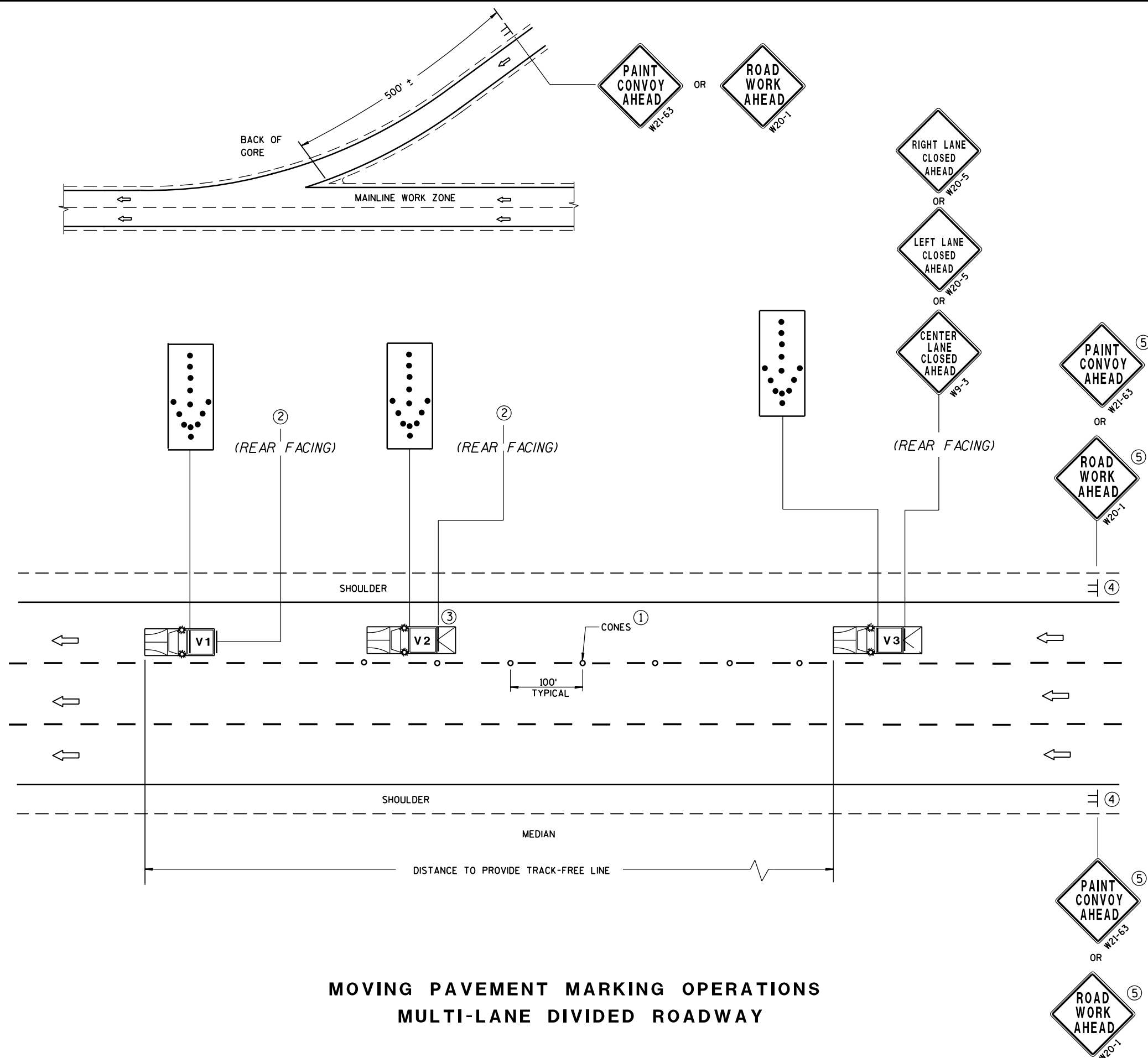
LEGEND

- | | |
|---|------------------------------|
| V1 | LEAD VEHICLE |
| V2 | SHADOW VEHICLE |
| V3 | TRAIL VEHICLE WITH TMA |
| TMA | TRUCK-MOUNTED ATTENUATOR |
|  | SIGN ON TEMPORARY SUPPORT |
|  | DIRECTION OF TRAFFIC |
|  | CONES |
|  | FLASHING ARROW PANEL (MERGE) |

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER
FHWA



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGE LINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGE LINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

- V1 LEAD VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE WITH TMA
- TMA TRUCK-MOUNTED ATTENUATOR
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (MERGE)

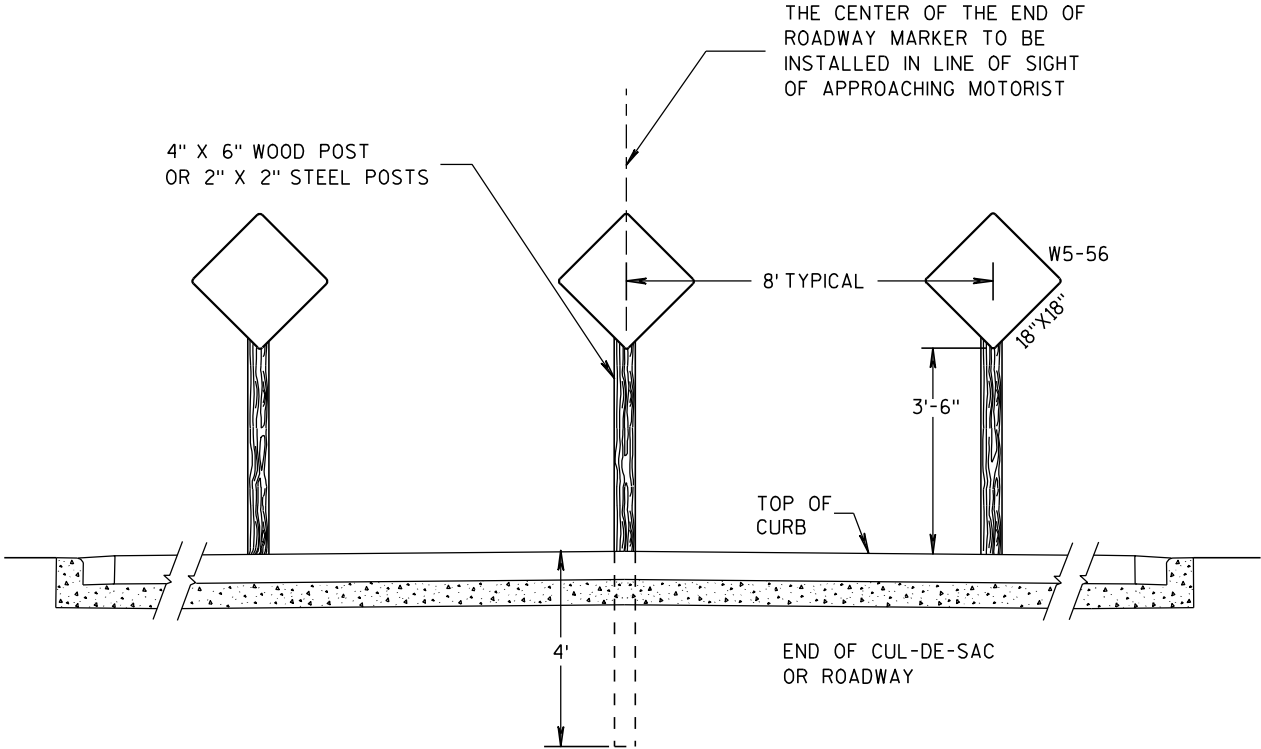
MOVING PAVEMENT MARKING
OPERATION
MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA



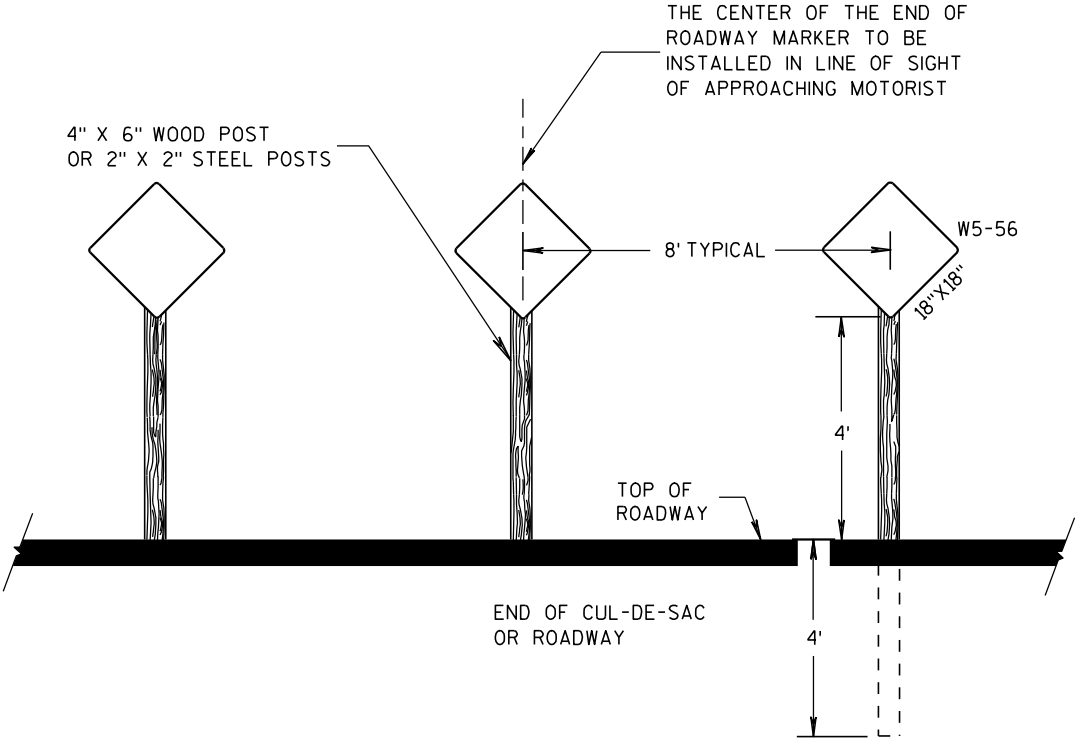
TYPICAL URBAN SIGN INSTALLATION
(WITH CURB & GUTTER)

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL RURAL SIGN INSTALLATION
(WITHOUT CURB & GUTTER)

END-OF-ROADWAY SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/1/2011 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- POST WITH ATTACHED SIGN IN DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

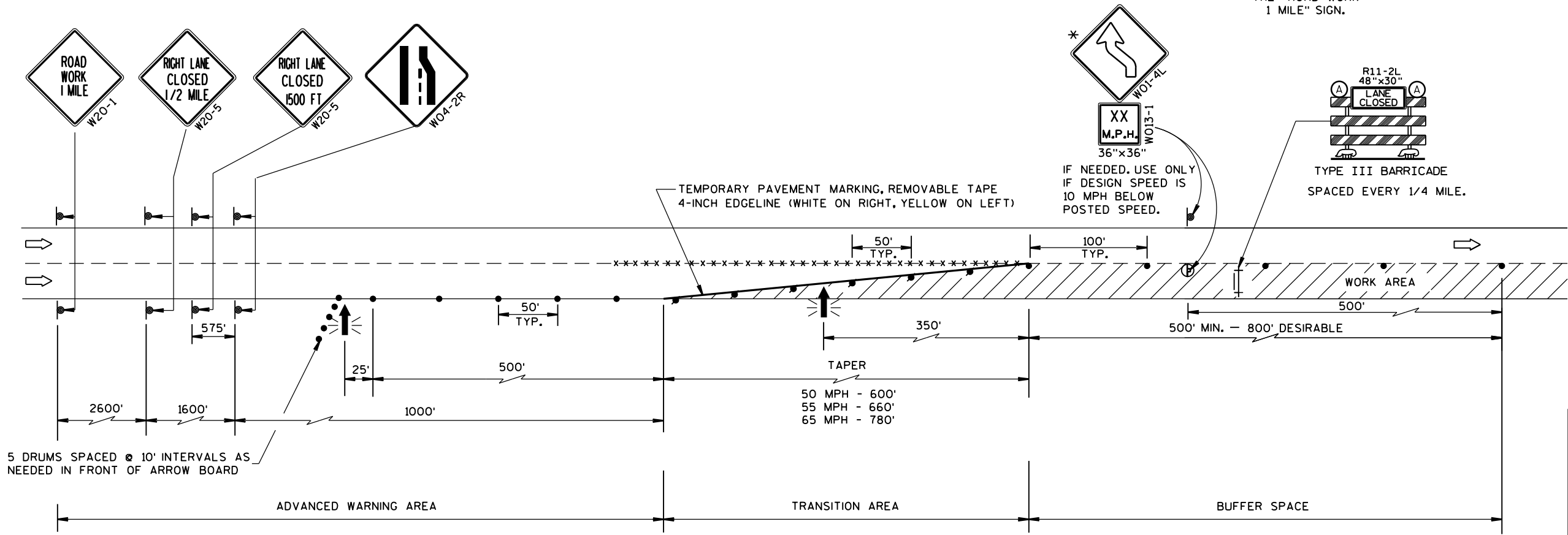
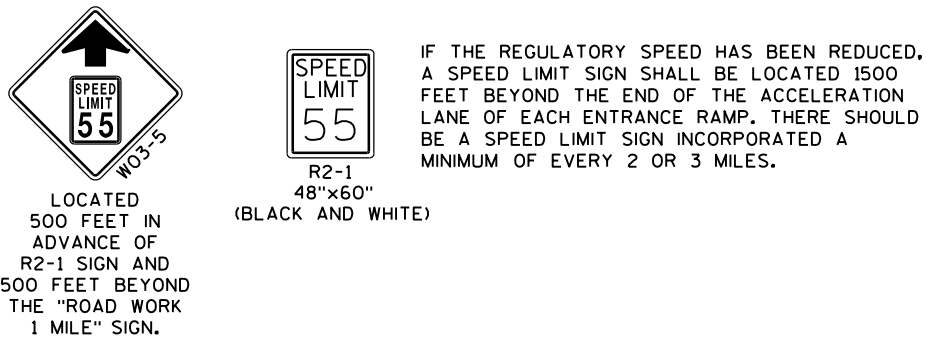
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

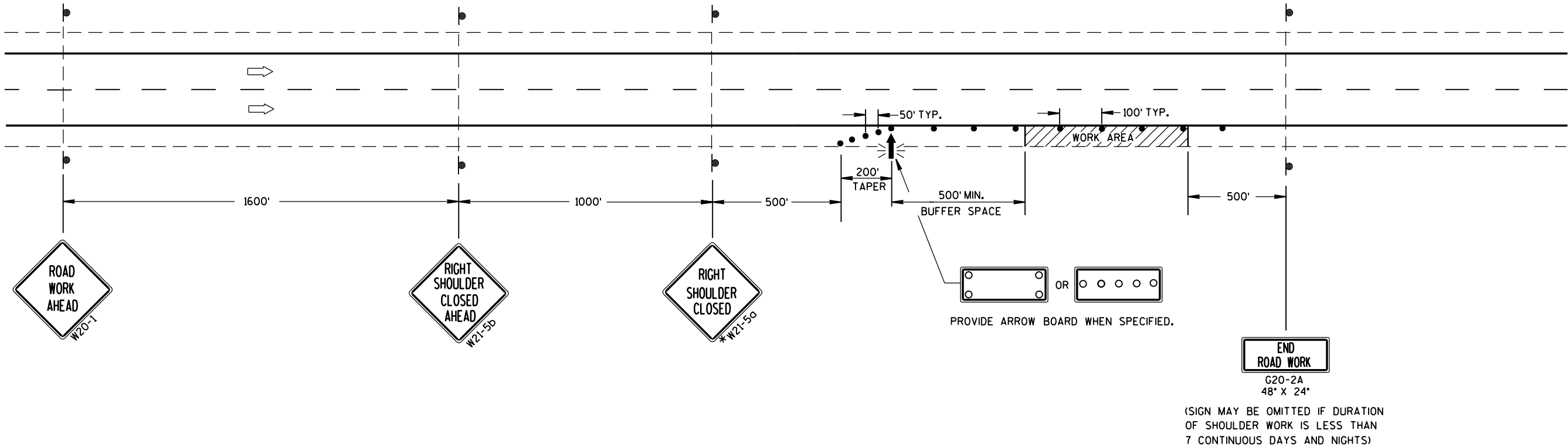
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.

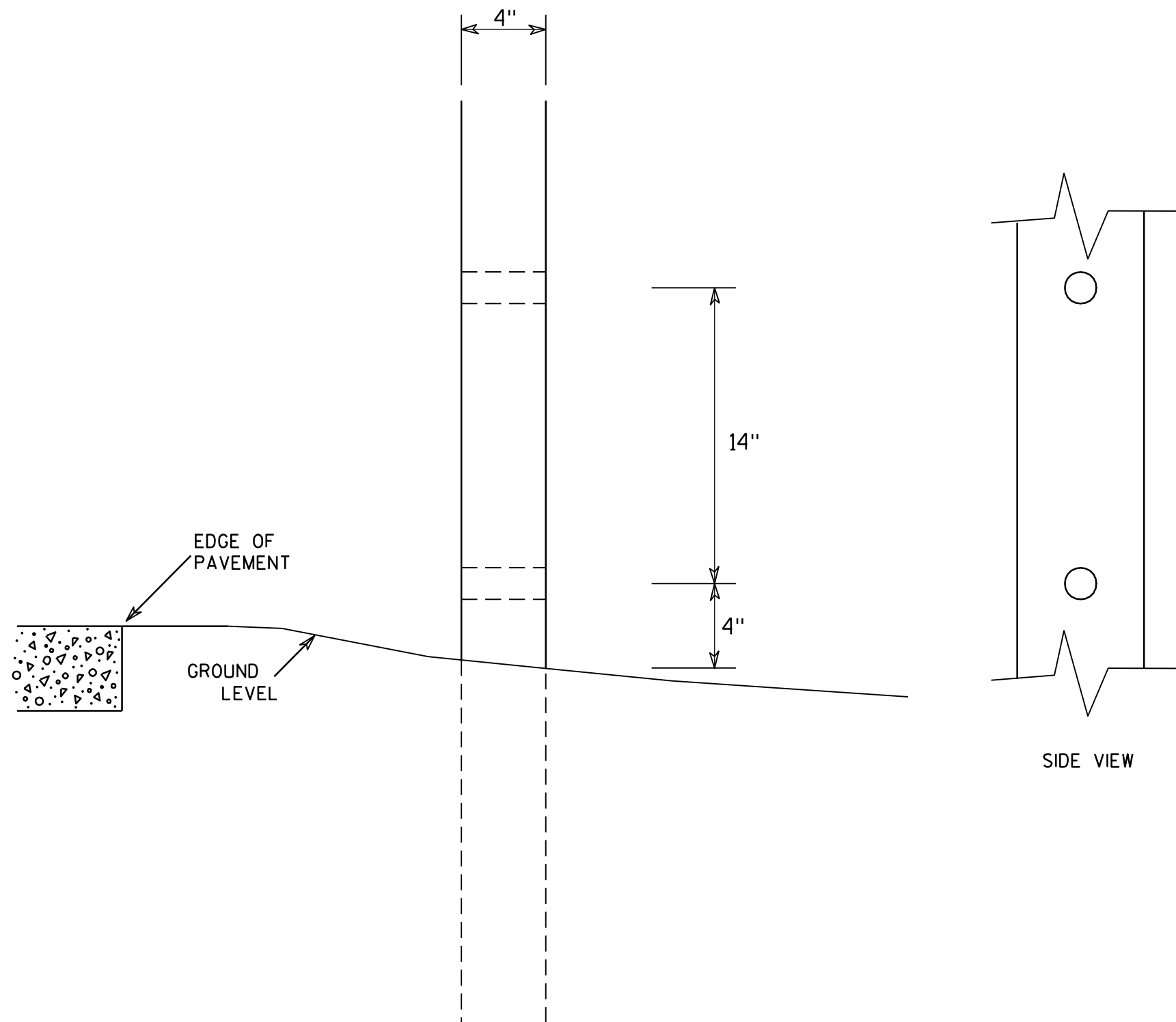


TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 /S/ Travis Feltz
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

7

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

**4 X 6 WOOD POST
MODIFICATIONS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

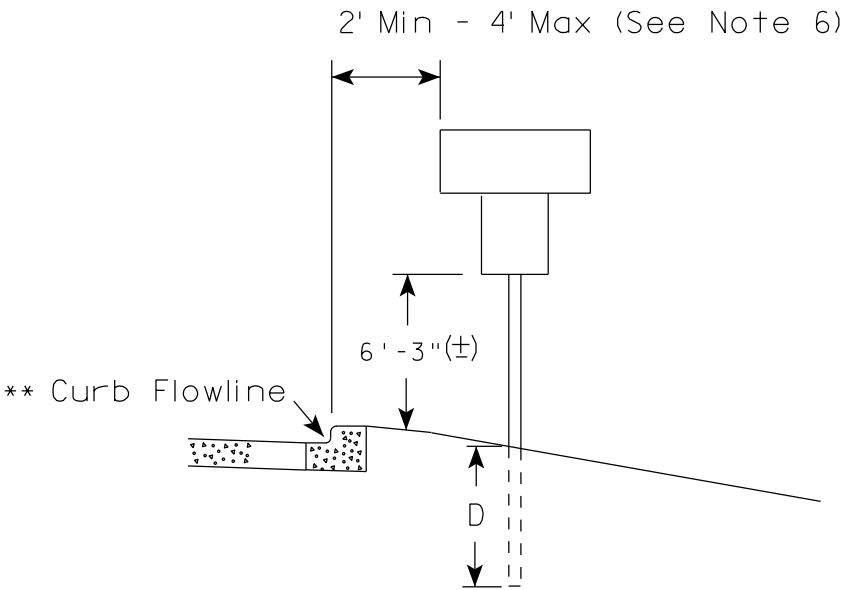
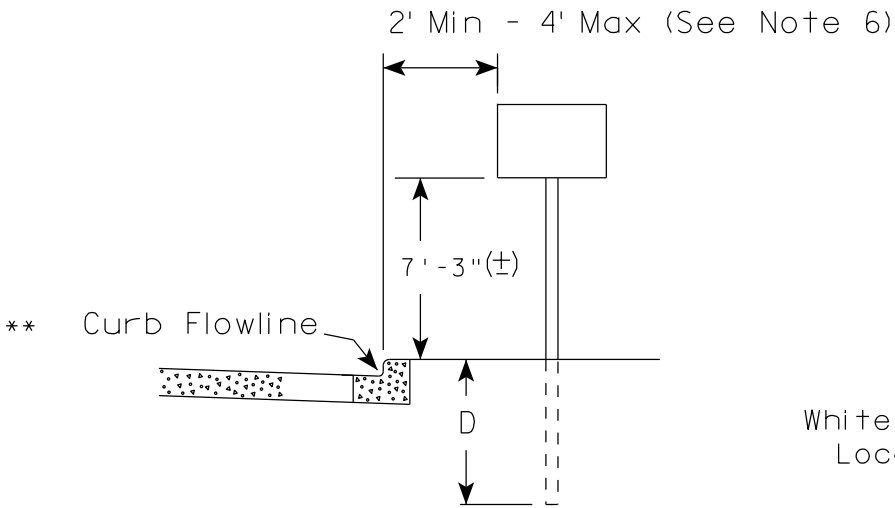
HWY:

COUNTY:

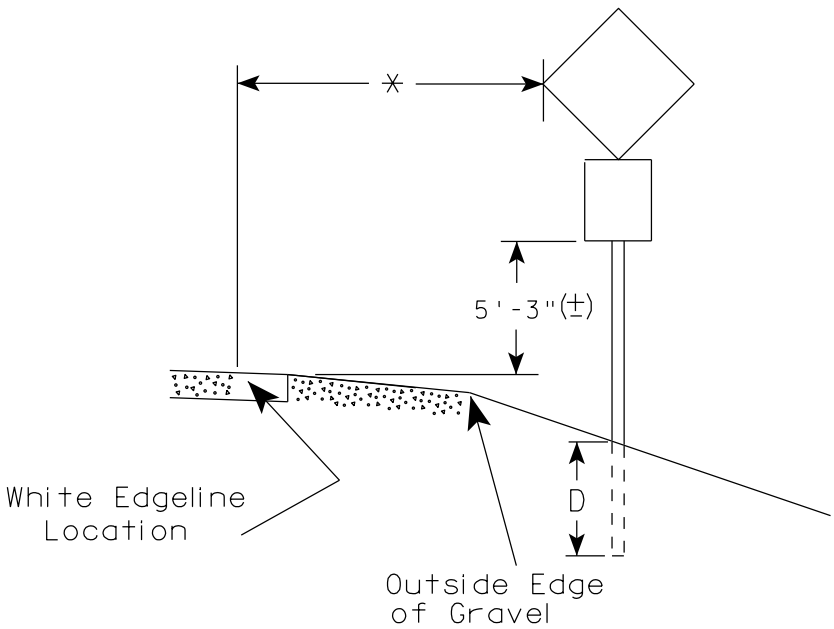
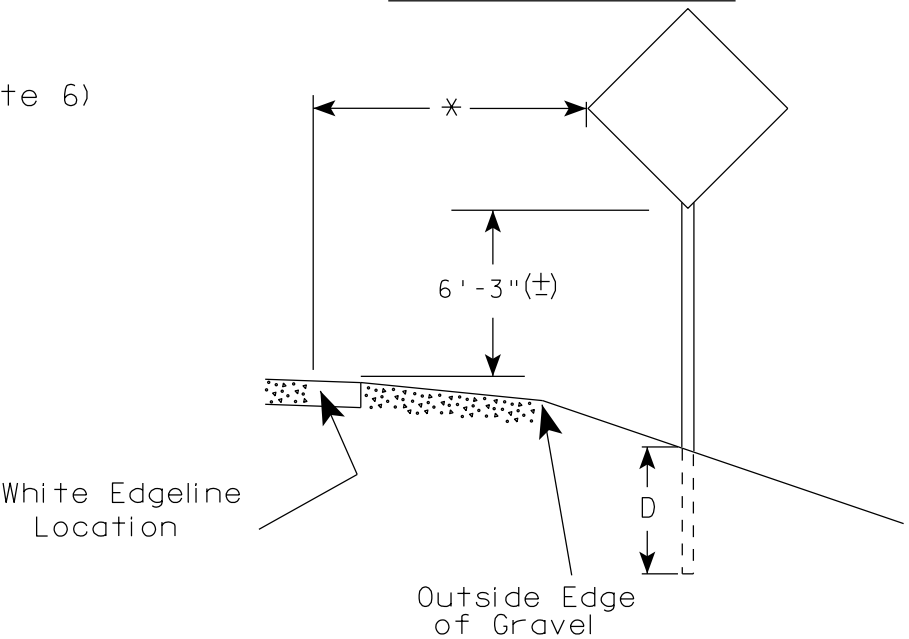
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

×× The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

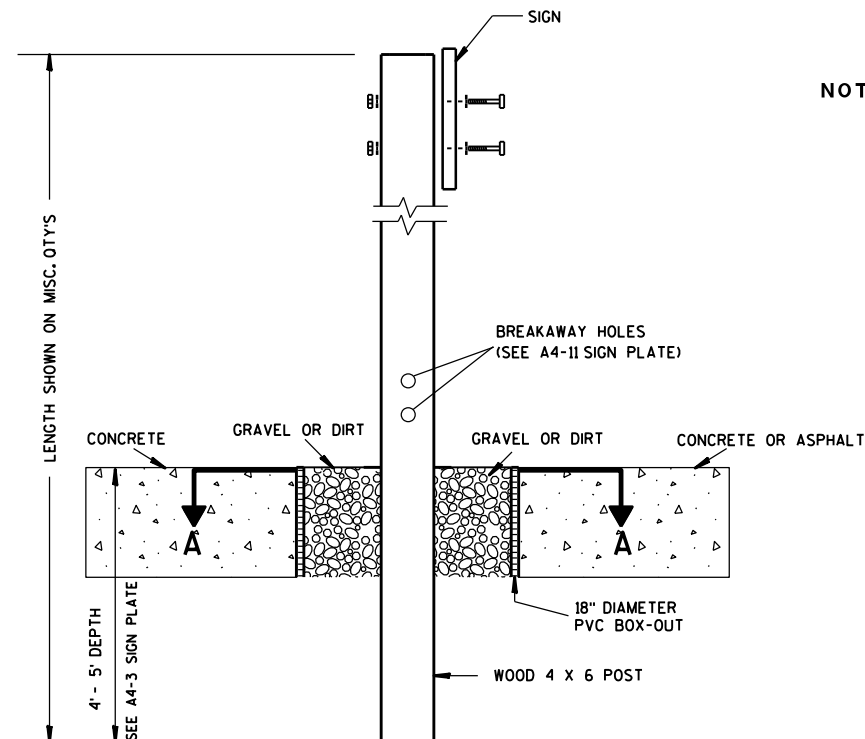
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

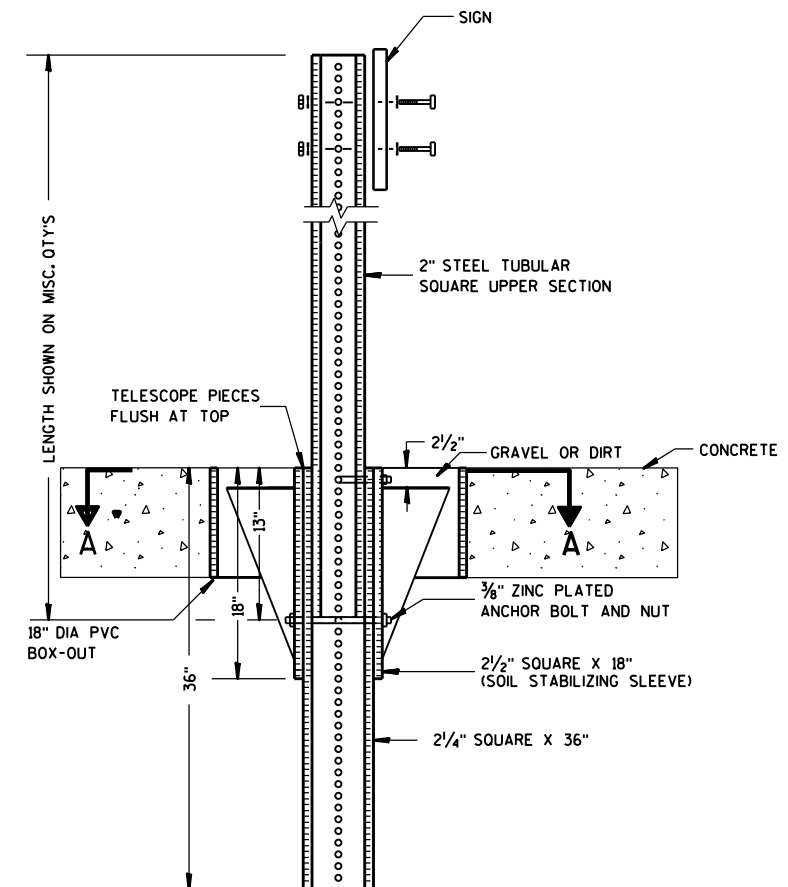
DATE 9/30/13 PLATE NO. A4-3.18



ELEVATION VIEW

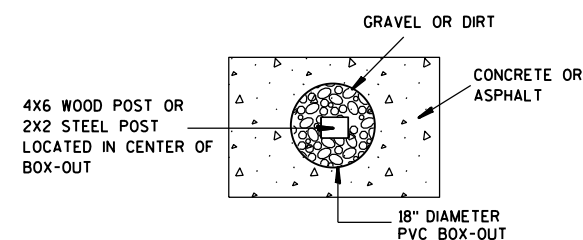
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES:**
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
 2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
 3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

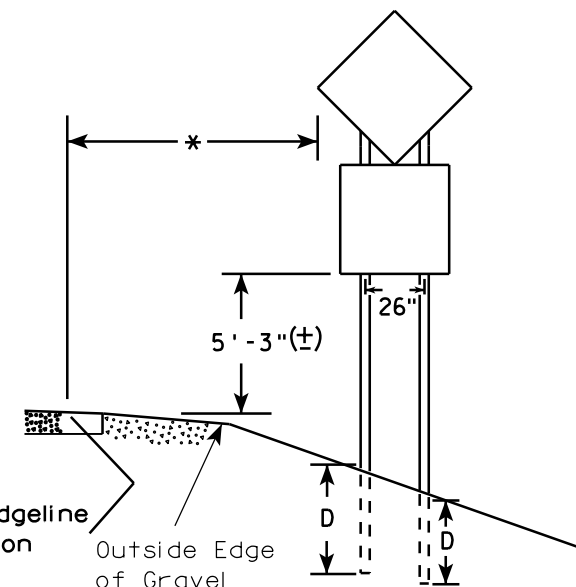
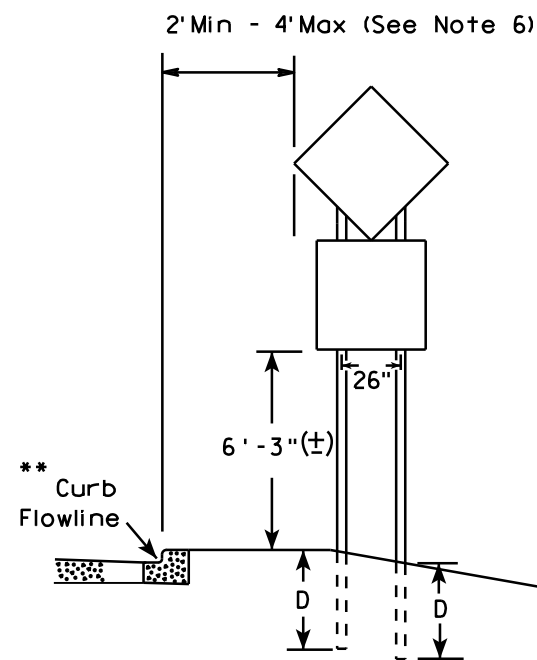
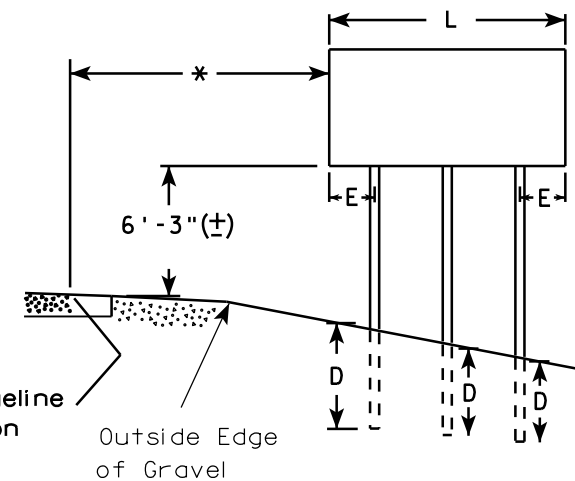
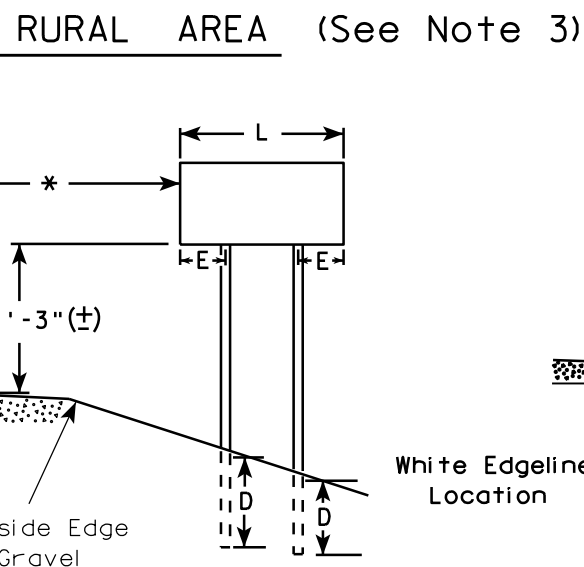
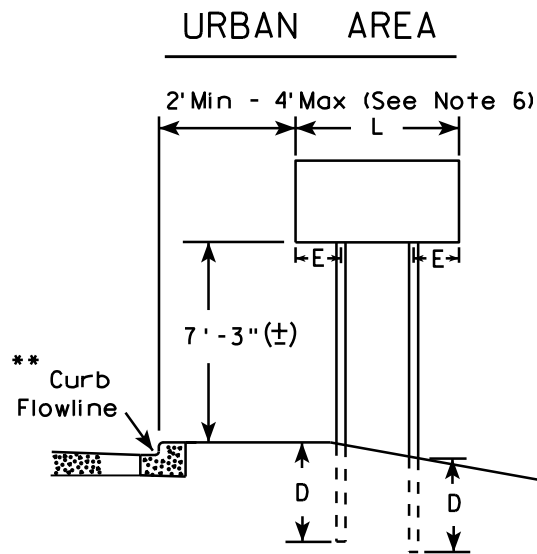
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 - See tables below for required number of posts.
 - For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 - The (±) tolerance for mounting height is 3 inches.
 - Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 - Offset distance shall be consistent with existing signs or consistent throughout length of project.
 - Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 - The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

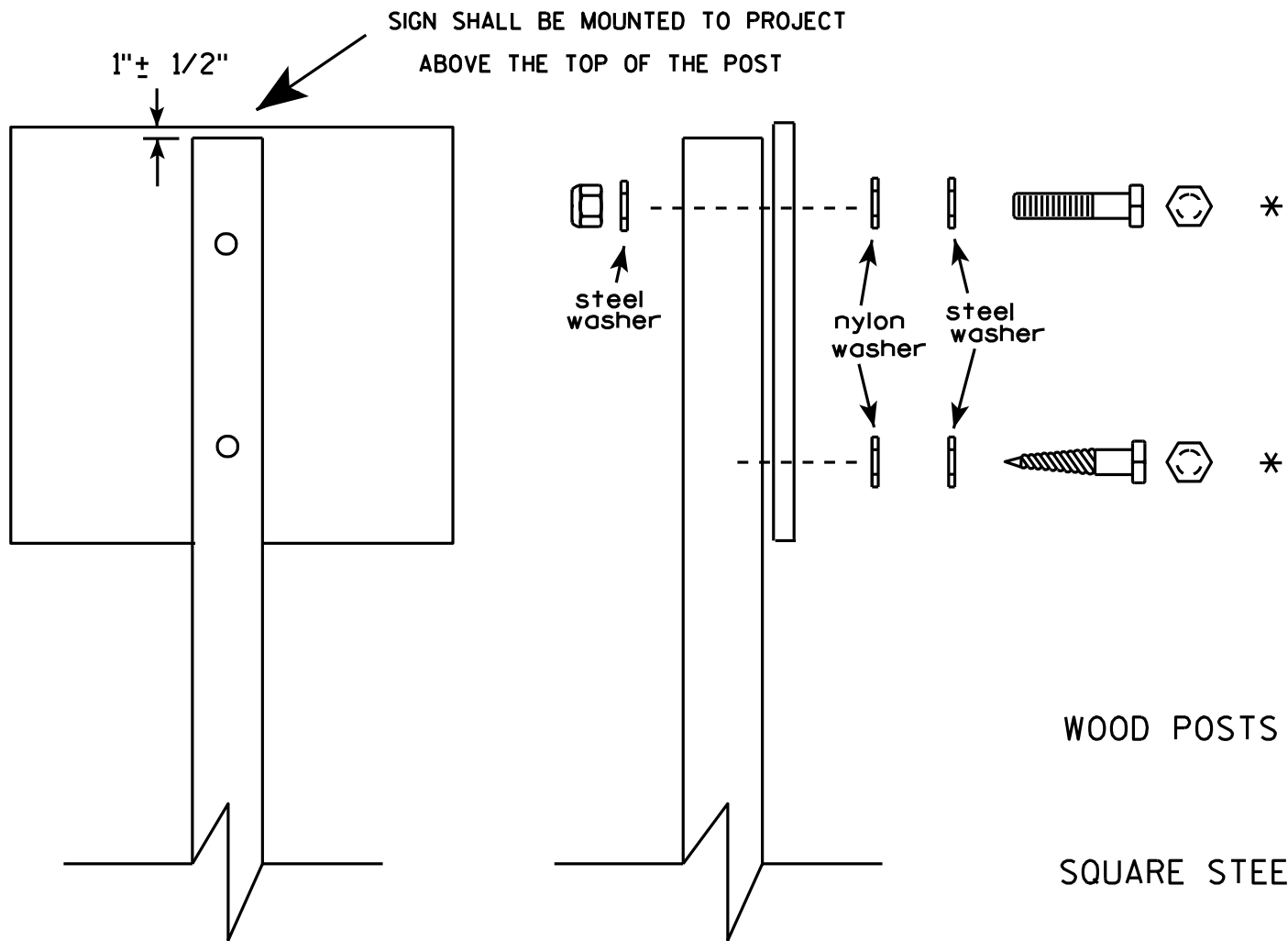
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

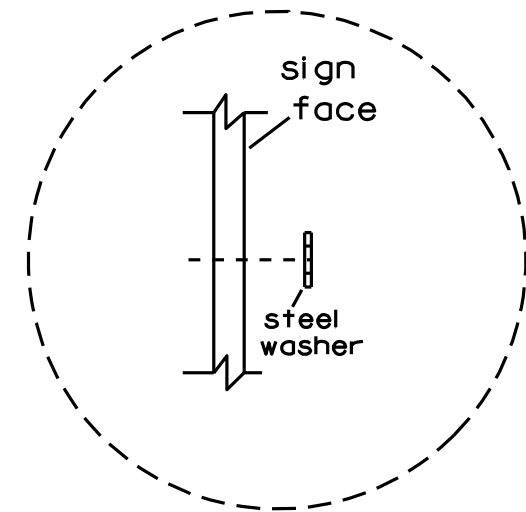
DATE 9/30/13 PLATE NO. A4-4.12



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.



Washer Placement when Sign Has Other Than Type H or Type F Face

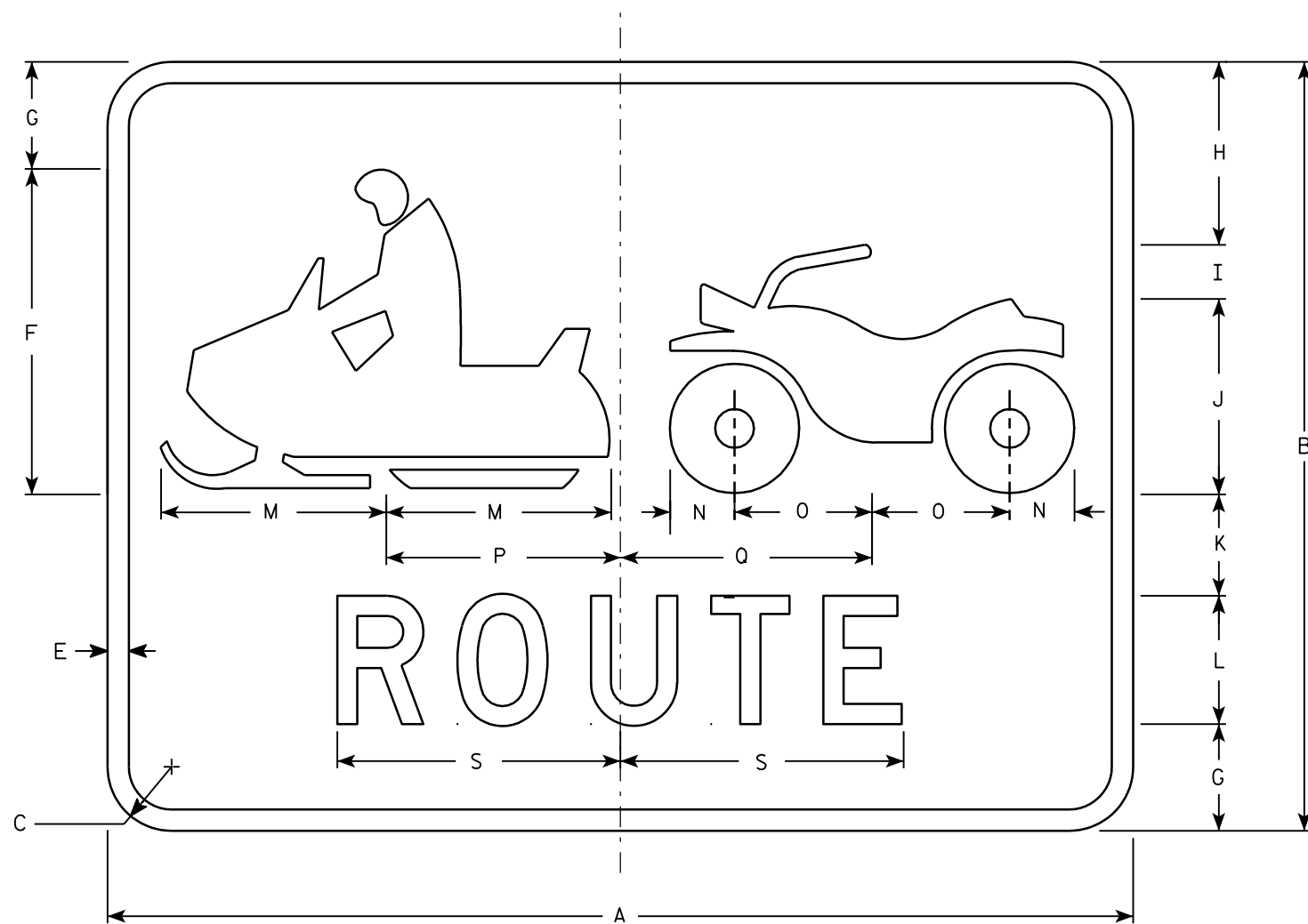
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 450 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24	18	1 1/2		1/2	7 5/8	2 1/2	4 1/4	1 1/4	4 5/8	2 3/8	3	5 1/4	1 1/2	3 1/4	5 1/2	5 7/8		6 5/8								3.0	.28
3																												
4																												
5																												

PROJECT NO:

STANDARD SIGN

D11-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

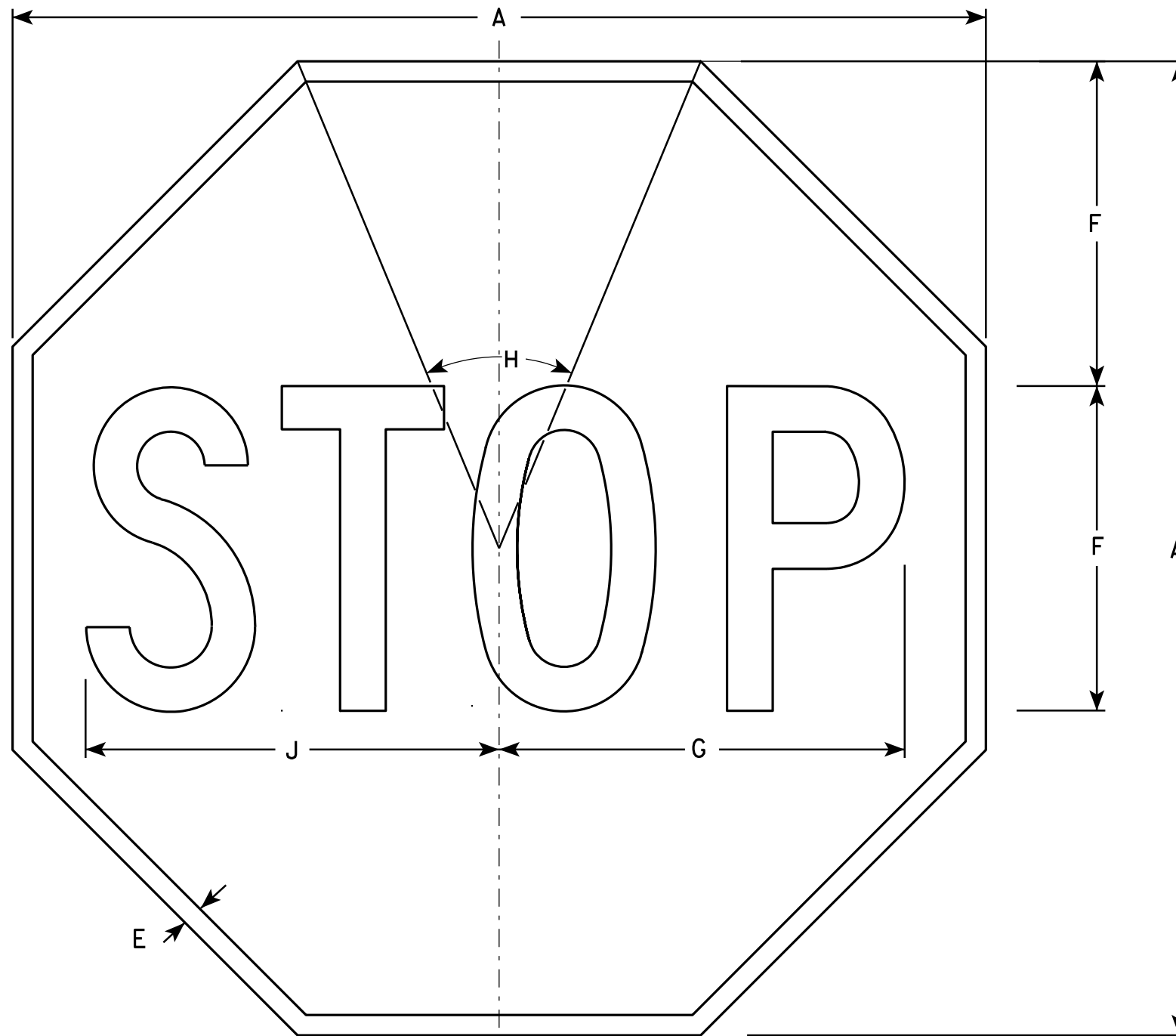
Christa J. Spang
for State Traffic Engineer

DATE 1/16/02

PLATE NO. D11-8.2

SHEET NO:

E



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:

HWY:

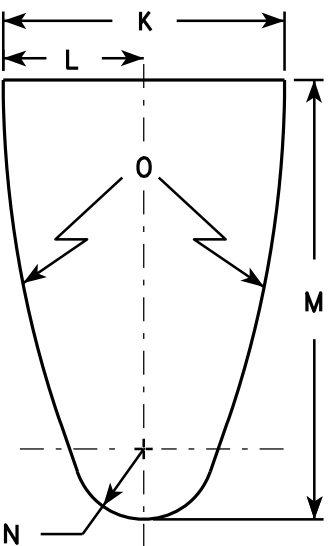
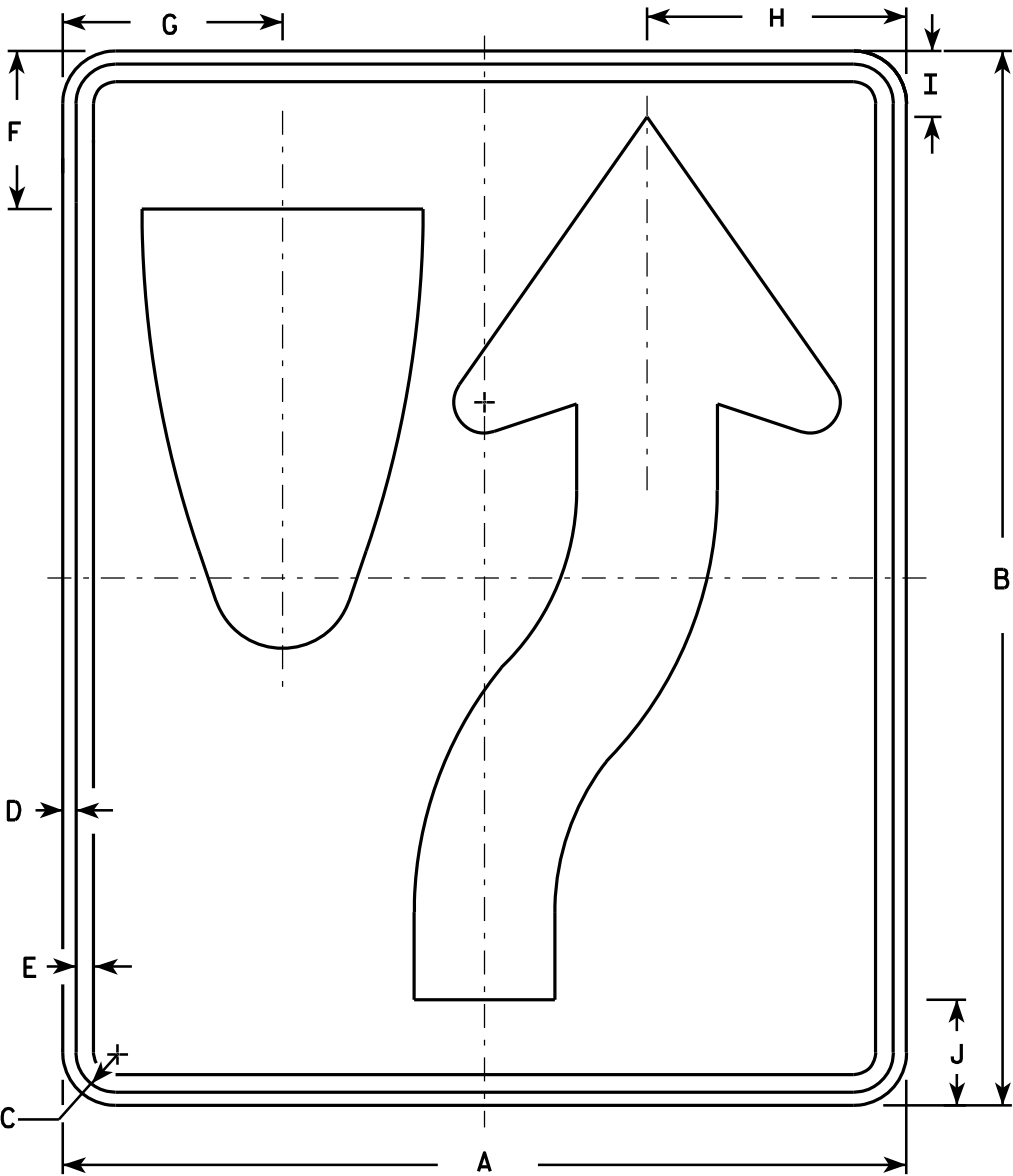
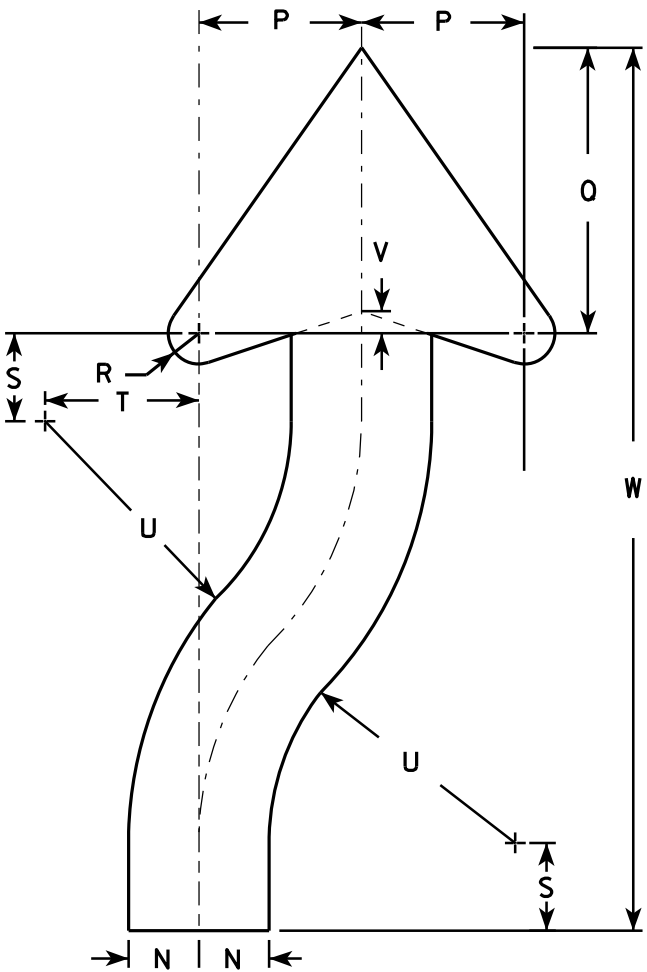
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
- 2. Color:
Background - White
Message - Black
- 3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
- 4. R4-8 is the same as R4-7 except Legend is reversed.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:

HWY:

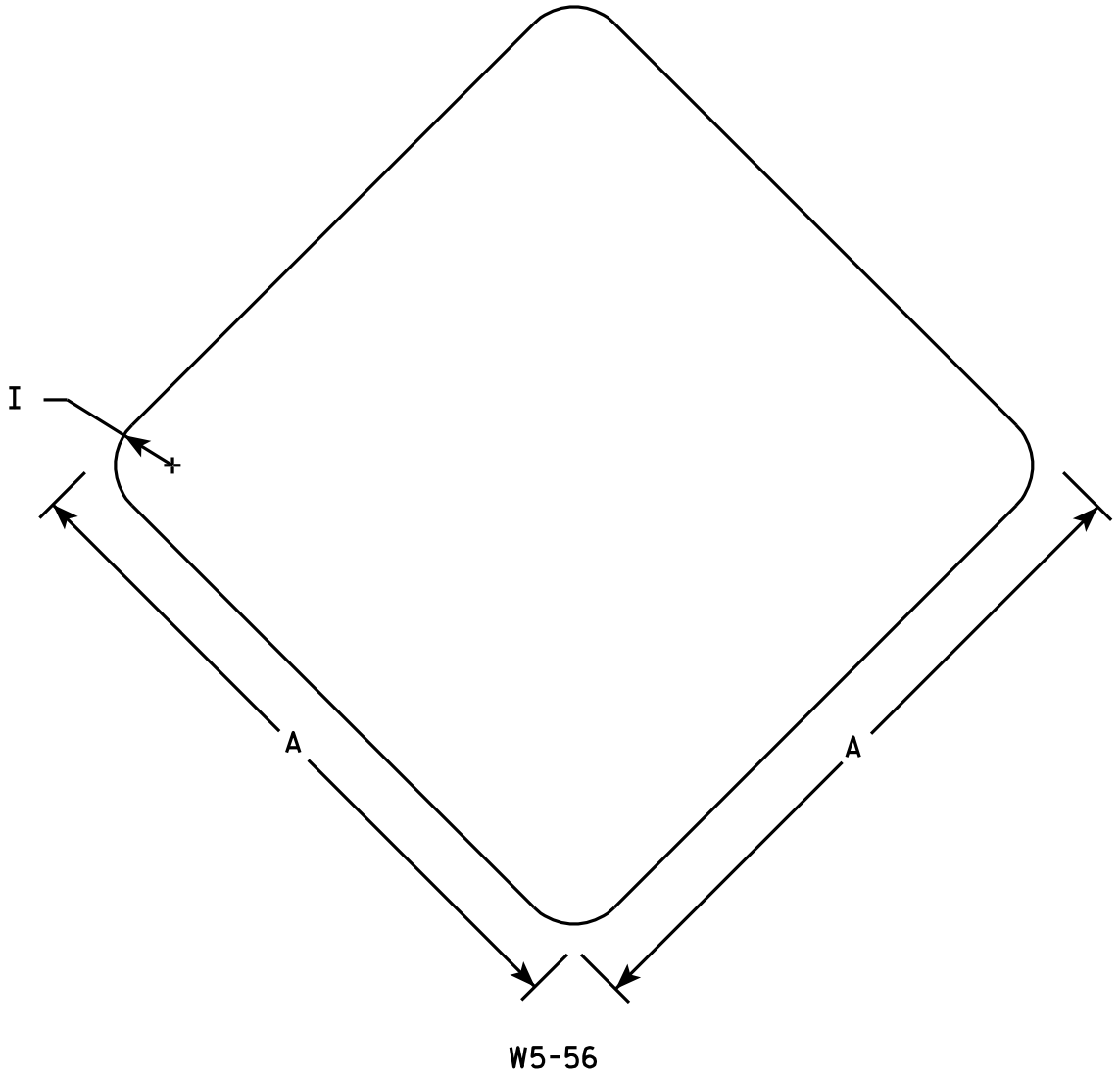
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
- 3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

STANDARD SIGN

W5 - 56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

STATION	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)					Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill		Reduced EBS In Fill	
												130	0.80		
														Note 1	
923+00.00	92300		0	0	0	0	0	0	0	0	0	0	0	0	
923+50.00	92350	50	1	0	0	1	0	0	0	1	0	0	0	1	
924+00.00	92400	50	10	2	0	11	2	0	0	12	0	0	0	10	
924+50.00	92450	50	6	13	0	15	14	0	0	27	0	0	0	11	
925+00.00	92500	50	11	2	0	16	13	0	0	43	0	0	0	14	
925+50.00	92550	50	5	1	0	15	3	0	0	59	0	0	0	27	
926+00.00	92600	50	5	1	0	9	2	0	0	68	0	0	0	34	
926+50.00	92650	50	8	1	0	12	1	0	0	80	0	0	0	45	
927+00.00	92700	50	8	0	0	15	1	0	0	95	0	0	0	59	
927+50.00	92750	50	2	0	0	9	0	0	0	104	0	0	0	68	
928+00.00	92800	50	2	0	0	4	0	0	0	109	0	0	0	72	
						109	36	0	0						

STATION	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Backfill 1.30	Reduced EBS In Fill 0.80	
26+50	2650		3.8	9.0	40.5	0	0	0	0	0	0	0	0	0
26+75	2675	25	2.6	9.0	110.2	3	8	70	0	3	87	0	0	-93
27+00	2700	25	15.3	9.1	210.5	8	8	148	0	11	273	0	0	-278
27+25	2725	25	23.3	9.2	298.1	18	8	235	0	29	567	0	0	-563
27+39	2739	14	47.0	0.0	323.2	18	2	163	0	48	771	0	0	-751
						48	28	617	0					

Notes:

1 - Cut

Cut Includes Salvaged/Unusable Pavement material

2 - Salvaged/Unusable Pavement Material

This does not show up in cross sections

3 - Fill

Does not include Unusable Pavement Exc volume

4 - Expanded Marsh Backfill

Will be backfilled with Granular Backfill (or Cut, or Borrow)

5 - Expanded EBS

Will be backfilled with Granular Backfill (or Cut, or Borrow)

6 - Reduced Marsh In Fill

Reduced Marsh Excavation that can be used in Fill

7 - Reduced EBS In Fill

Reduced EBS Excavation that can be used in Fill

8 - Mass Ordinate

If Marsh or EBS to be backfilled with Cut or Borrow: $2(Cut + Marsh\ Exc + EBS) - ((Fill - Reduced\ Marsh\ In\ Fill) - (Reduced\ EBS\ In\ Fill) - Expanded\ Rock) * Fill\ Factor)^3$

8 - Mass Ordinate

If Marsh and EBS to be backfilled with Granular: $2(Cut + EBS + Marsh\ Exc) - ((Fill - (Reduced\ Marsh\ In\ Fill) - (Reduced\ EBS\ In\ Fill) - (Expanded\ Rock)) * Fill\ Factor))^3$

8 - Mass Ordinate

If Marsh and EBS to be backfilled with Granular: $2(Cut) - ((Fill - Expanded\ Rock) * Fill\ Factor))^3$

8 - Mass Ordinate

If Marsh and EBS to be backfilled with Cut or Borrow: $2(Cut) - ((Fill - Expanded\ Rock) * Fill\ Factor))^3$

Notes for macro:

This option assumes that the pavement removal is shown in the cross sections.

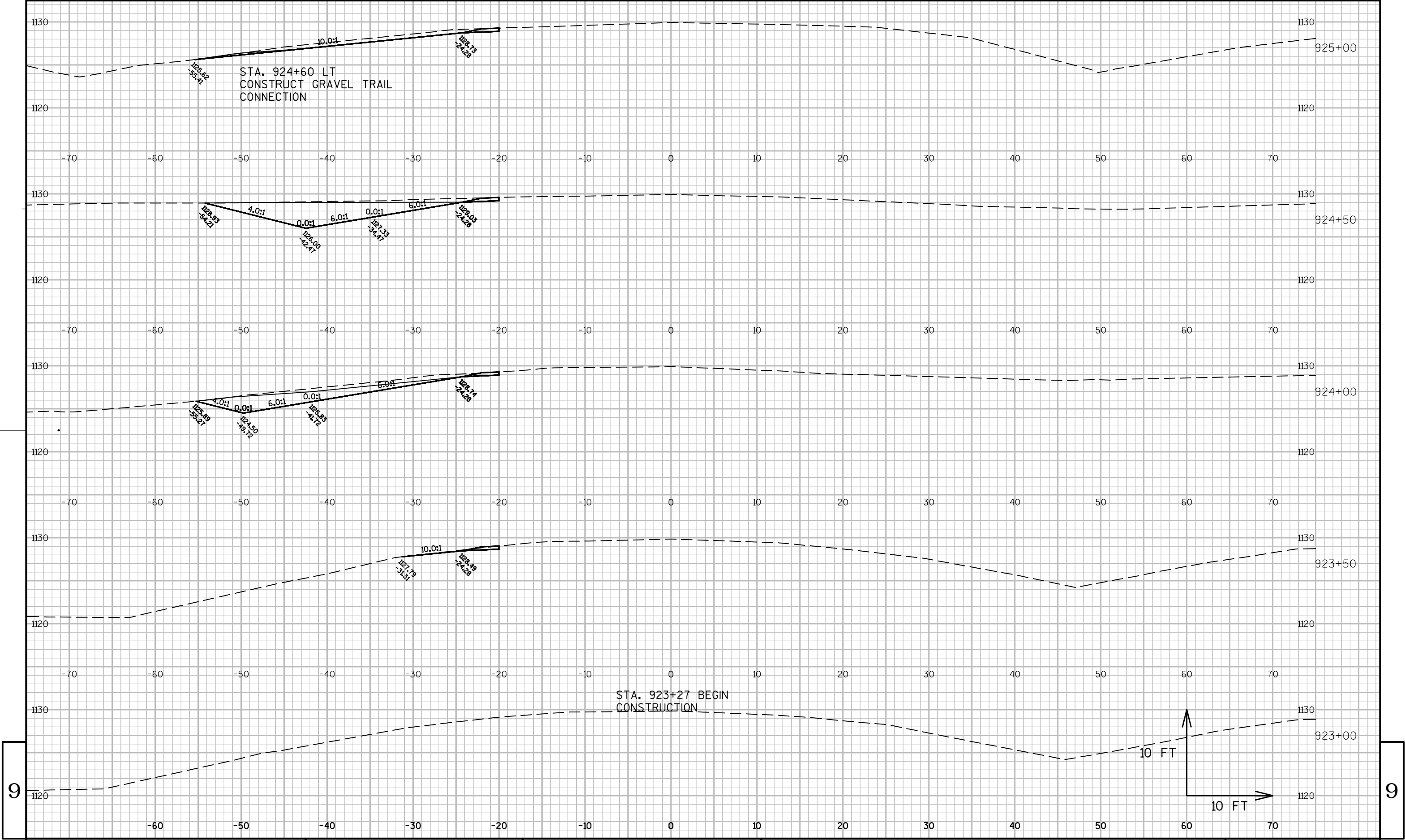
Make a check box to show which option was used

Spreadsheet option 1 or 2

If the pavement removal is in a fill area then it needs to add the area of pavement removed to the fill area

Mass haul does or does not include Marsh and EBS in the fills

Common will be quantified when we do the summaries



9

9

PROJECT NO:1195-01-74

HWY: USH 53

COUNTY: DOUGLAS

CROSS SECTIONS: USH 53

SHEET

E

FILE NAME : F:\DRAWINGS\2012-134\0005\11950104\SHEETSPLAN\090102_XS.DWG

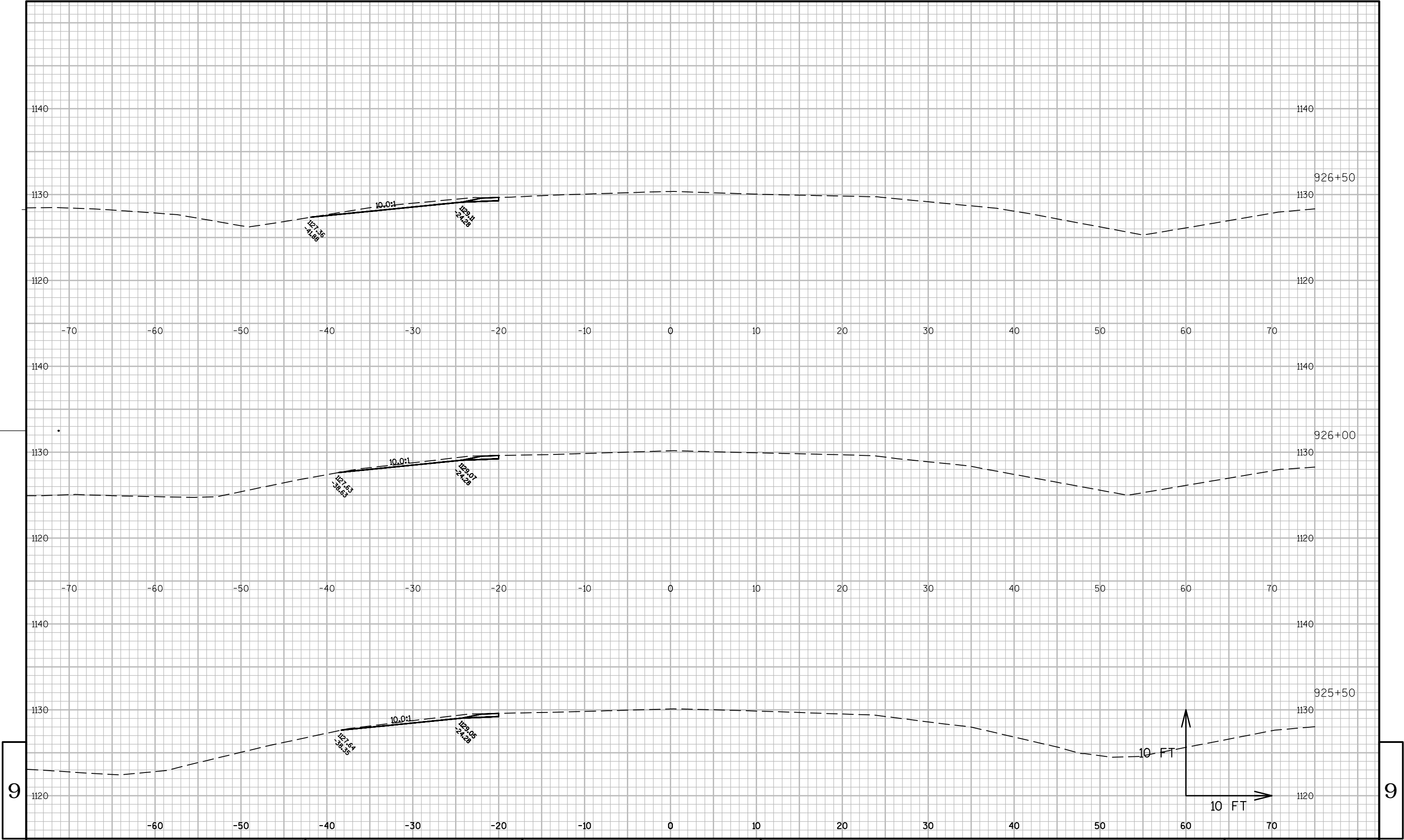
PLOT DATE : 1/31/2014 4:45 PM

PLOT BY : MATT GUNDRY

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49



9

9

PROJECT NO:1195-01-74

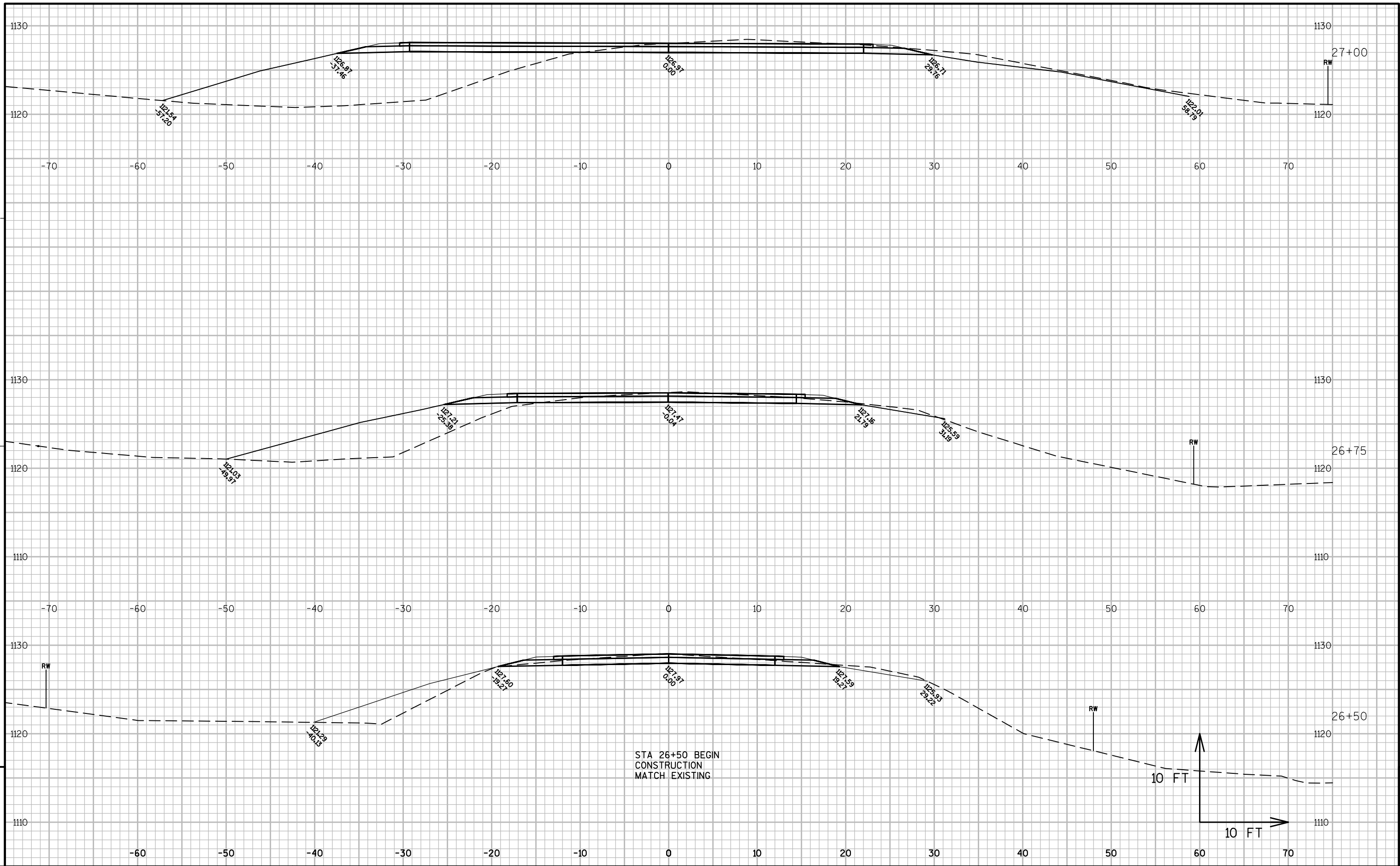
HWY: USH 53

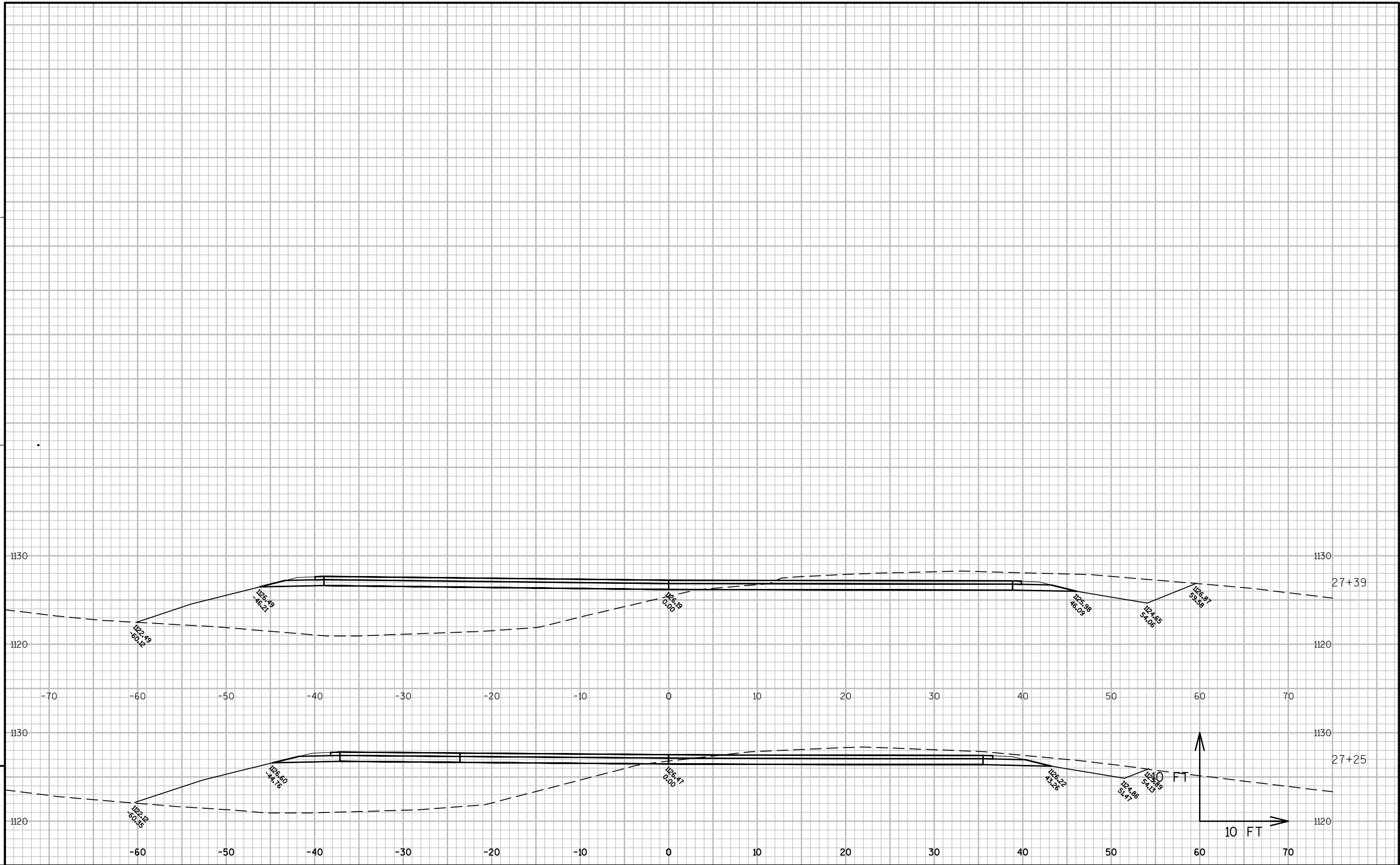
COUNTY: DOUGLAS

CROSS SECTIONS: USH 53

SHEET

E





Notes



Wisconsin Department of Transportation

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<http://www.dot.wisconsin.gov>